



THE PROJECT MANAGEMENT STANDARD

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MESSAGE FROM THE CHAIR

by Robert (Robb) Gries, P.E., CCM, PMP, Chair

The Two Faces of Janus

At this time of year, I often think of the Roman god Janus with its two faces, one looking backward and one looking forward. Looking back, I reflect upon the events and activities of the year, and I identify the things for which I am grateful. I am thankful for many things, but I am particularly thankful for my family and friends, as well as good health for me and my family. I am also appreciative of my current job and all the benefits that are the result of one's hard work, perseverance, and determination.

Looking forward, I am eager to tackle the many challenges that await—whether they are at work, in my personal life, or with my professional associations. Within PMI, the DPC Board will finalize its transition to a new Community of Practice (CoP), ushering in new opportunities for professional development and personal growth. The Board will be conducting its annual strategic planning session in mid January, and we will finalize our Business Plan and disbursement of the SIG's funds including the transfer of funds to PMI for the new CoP to operate. I am very excited about our organizations plans for 2010 and beyond, so please "stay tuned." We will have more information forthcoming in the next several weeks.

In closing, I would like to wish everyone a happy holiday season and all the best for 2010.

PMI® PROJECT OF THE YEAR – FLUOR’S NEWMONT TS POWER PLANT

by Robert Toet, PMP, DPC SIG Deputy Communications

The best of the best in project management were celebrated Saturday October 10th, 2009 during the Project Management Institute’s (PMI) annual awards ceremony held during the PMI® Global Congress—North America in Orlando, Florida, USA.

One of the night’s most anticipated awards, PMI’s Project of the Year, was presented to Fluor’s Newmont TS Power Plant project for their work on a state-of-the-art power plant in rural Nevada. Faced with a dearth of skilled talent and the threat of increased environmental regulation, the team brought the project in under budget and 10 weeks early.



Newmont TS Power Plant

The PMI® Project of the Year (POY) Award recognizes the accomplishments of a project and the involved project team for superior performance and execution of exemplary project management. Projects from throughout the world are encouraged to participate, regardless of size, industry type or location.

During the exhaustive nomination process, the Fluor project team outlined how risk mitigation played a major role in overcoming challenges throughout the execution. A few of these challenges included:

- The economic landscape in 2004 produced an unparalleled demand for technical resources, construction commodities and construction labor. This resulted in one of the most significant domestic resource challenges Fluor has ever experienced.

In order to overcome the various market challenges, the TS Project team immediately recognized the need to develop multiple tools in order to make effective cost decisions. One of the primary tools was a strong and inclusive Value Creation program engaging the entire project team in developing cost saving ideas. Project Management continued to insist on a message of acting proactively to identify risks and provide subsequent solutions through work processes such as plans, meetings, and brainstorming sessions. This constant message created a project-wide attitude of breaking the project into manageable segments and constantly identifying upcoming challenges and solutions. The work process ultimately created a large volume of Value Creation ideas which were implemented to deliver value to the client and significantly improve the project’s bottom line.

- The project location in northern Nevada was very remote with the nearest town, Battle Mountain approximately 45 miles to the west. The town offered very limited resources and housing. Moreover, the project site was exposed to extreme cold winters which hindered the recruitment of skilled craftsmen from warmer climates. Given the limited amount of housing, Fluor addressed the issue head-on by hiring a full-time “Housing Coordinator” who reserved rooms ahead of craft mobilization. Secondly, the project worked with Newmont to develop a “fifth wheel” connection park where staff could lease spots at reduced rates. The project also acquired housing trailers for this location for those without a “fifth wheel.”

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POWER PLANT CONTINUED

Moreover, the Fluor project team worked with local motels to help repair damaged rooms with the agreement that those rooms would be reserved for Fluor employees. The challenges of recruiting and retaining were addressed by ensuring the compensation package was sufficient to meet market demands as well as large amounts of aggressive marketing in regional papers. Local transportation costs were addressed as the project created a bussing system whereby workers could ride a company-furnished bus to and from work at a highly-reduced cost. To ensure workers were not drawn away from the TSPP by the local mining operations, it was critical for the project to advertise and implement completion and safety bonuses which were available if the workers remained at site through their respective Reduction of Force date. This acted as an incentive to keep workers focused on the job at hand.

- Newmont required that this facility incorporate state-of-the-art proven technologies within the design to ensure a highly efficient and reliable facility that could be operated with a minimum staff resulting in low operating costs. This coal-fired power facility represented one of the first in a new generation of coal-fired power plants after nearly a decade of very few new plants in the United States. The facility was located in an area of high seismic activity and would be one of the first large boiler structures to be designed under the new requirements of the International Building Code (IBC) 2003.
- In addition, Newmont had determined that they would use low sulfur Powder River Basin coal. While the environmental benefits of this fuel source are well known given its relatively lower contribution to SO₂ emissions, the fuel is very friable and has an extremely high volatility. The fuel has been the cause of many power plant explosions. The TS Power Plant team immediately incorporated the Safety and Security program into the conceptual and design phase of the project. This was ensured by undergoing Fluor's proprietary Process Hazards Analysis (PHA) Review, a practice whereby the design and operations team systematically reviews the system design and conducts a qualitative evaluation of the safety aspects of the design. The PHA Review's objective was to supplement prior design reviews that had been conducted (P&ID Reviews, 3D Model Reviews, etc.) with a specific focus on identifying hazards, potential hazards, and operability problems. This focus during the design phase further demonstrates Fluor's culture of safety and its recognition of world-class design in the power industry. The TSPP Project proactively implemented best practices from both Fluor's and Newmont's safety programs. Examples of these initiatives included:
 - All signs throughout the TSPP worksite and all Daily Task Assignments were bilingual to accommodate a large Hispanic workforce
 - An aggressive drug screening program was put in place to ensure a healthy site

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POWER PLANT CONTINUED

- A Daily Incident Log was developed and distributed to Site management prior to the close of each working day. This was instrumental in early identification of negative trends
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- Implementation and leadership of Quarterly Risk Reviews
- Implementation of a Task Observation Program
- Implementation of a Competent Person Listing
- Integration of Security into the HSE Manual
- Establishment of Emergency Response Teams and excellent emergency response
- Installation of a streaming LED sign to make all craft entering plant area aware of daily potential safety hazards
- Zero Incidents Award Verification Audit

Most importantly, Fluor developed an atmosphere of accountability whereby each employee was responsible for their safety. This attitude was exhibited by each employee including the Fluor TSP Leadership Team, as well as the Fluor Executive Management Team.

Despite the challenges, the project team created success in all project facets. In Health, Safety and Environmental, 3 million work-hours were performed without a lost-time accident.

Reliable power generation was completed on April 16th, 2008, almost 10 weeks ahead of schedule. Full load was achieved only 27 days after First Fire on Coal.

This accelerated schedule also assisted in exemplary cost savings results:

- a. The early completion allowed numerous overhead savings and contributed to the overall capital project savings of approximately \$20 million.
- b. Approximately \$15 million savings in Power costs due to early start-up.
- c. During the commissioning phase of the project, the accelerated schedule meant additional power was sold to the grid which generated an additional \$3 million above the forecasted plan.
- d. Operational Power Output was higher than design, creating benefits of roughly \$57 million to Newmont. (NPV of power sales over 30 years)
- e. Operational Heat Rate was more efficient than design, producing benefits of roughly \$15 million (NPV of power sales over 30 years)

In Newmont's submittal letter to the Project Management Institute, Newmont's Project Manager wrote "With nearly 40 years of Construction Management experience on 5 continents, I can wholeheartedly say this was one of the best executed projects and definitely deserves to be called a 'World Class' Project."



From Left to Right: Eugene Bounds, PMI Board of Directors; David Constable, Fluor Group President; Guy Lansdown, Newmont Sr. VP; Gary Hevelone, Newmont Project Manager; Richard Gerspacher, Fluor Project Director; Patricia Downing, Newmont VP; Jim Mackey, Fluor VP; Rich Vargas, PMI Chair

INTEGRATING PRE-CONSTRUCTION MANAGEMENT OF CAPITAL PROJECTS: *A Better Planned Project is a Better Constructed Project*

by Chris Quaife and Doug Kaiser, PMP, DPC SIG Emeritus Past Chair

DPC SIG Co-operation with Canadian Construction Industry Organizations

In 2004, the SIG endorsed the Practice Manual *Management of Building Projects* which was developed in British Columbia, Canada. The SIG was also a major financial Sponsor of this 250-page Manual prior to its 2004 publication by the British Columbia Building Projects Committee, (a collaboration of professional associations).

Currently, the Canadian Construction Association, Engineers Canada, the Royal Architectural Institute of Canada and the BC Building Projects Committee are developing a National Canadian Guideline *Starting Building Projects*, which is targeted for publication in January 2010. It has 45 pages of main text, is a follow-up to the 2004 Manual, and will be available online at no charge when released. Apart from its recognition of regulations, it is for voluntary use. However, is intended to assist organizations in mandating their own practices. The Guideline is kept relatively short through its references to other publications.

The SIG has made a high-value contribution to the Guideline by providing feedback through two surveys – the first of its Canadian members, and the second of its US/Mexico members. As a result of the surveys, the SIG Board of Directors endorsed the Guideline in October, based on the Publication Draft, and follow on projects are being recommended for modifying the Guideline as necessary for use in the U.S. and Mexico.

The surveys also provided feedback to the originators, who have made revisions accordingly and are keeping comments to assist the modification. The SIG's global representation of all capital project roles enabled the surveys of a cross-section of the industry across North America. The Board extends special thanks to those who responded to the surveys.

Some respondents drew attention to existing valuable construction project publications. However, it is evident that it is new to publish a single short industry guideline that integrates the management roles in the concept and development stages of projects - especially from the perspectives of owners and those who manage projects on their behalf. Consistent with this finding, 93% of Canadian respondents supported publication of *Starting Building Projects* for use in Canada, and 84% of US/Mexico respondents supported modification of the Guideline for the wider audience.

[To read a draft of the Overview it can be downloaded at no charge at this link.](#)

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PRE-CONSTRUCTION MANAGEMENT CONTINUED

Links to DPC SIG's Values

The above publications align with the following elements of the SIG Mission and Objectives:

Alignment with DPC Mission

- Break down barriers that fragment the profession.
- Improve the understanding of capital project management.
- Promote collaboration between capital project stakeholders.
- Contribute to the professional development of our membership.

Alignment with DPC Objectives

- Demonstrate and promote project management principles as the most effective means for planning and managing projects.
- Establish a worldwide network of project management professionals in our industry.
- Provide a forum for the free exchange of project management ideas, solutions, experiences, and applications.
- Develop and disseminate consistent and appropriate standards of project management terminology, communications and practice among PM professionals.
- Provide PM information and education to DPC SIG professionals in industry, government and educational institutions improving the overall delivery of processes and services as well as the quality and value of completed projects.

As an example of how these elements can be brought together, a multi-association British Columbia initiative has been started, based partly on the Guideline. As a first step, it will deliver a pre-construction education seminar *Development and Procurement of Construction Projects* for Owners and those who manage or procure projects for them. The Vancouver Regional Construction Association is sponsoring the seminar and obtaining industry accreditation for it.

This initiative is headed towards:

- mutual alignment with others in the construction industry who are managers and/or instructors and have a focus on management of the project front end;
- the development and acceptance of an integrated practice model for pre-construction management, initially in British Columbia.

¹ Doug Kaiser, Past Chair of the DPC SIG organized surveys of the membership, Chris Quaipe is Coordinator for the *Starting Building Projects* Steering Committee,

Request a DPC SIG Membership Lapel Pin



As a token of the DPC SIG's appreciation for your participation in the SIG, we would like to send you a lapel pin. We encourage all members to wear the pin at PMI® chapter and international events and to look for, and network with, other DPC SIG members wearing their pins. Show your pride in the DPC SIG! Send an email to administrator@dpcsig.org.

Be sure to include your mailing address.

We're Looking for Book Reviewers and Books to Review



Is there a new project management related book that you would like to read or see reviewed? The DPC SIG is offering a book review program. Simply submit the title of the book you want to review for approval, purchase the book, and upon receipt of the final book review, DPC SIG will reimburse you and publish your review in *The Project Management Standard*. In exchange for the review, you'll get to keep the book you reviewed and earn PDUs.

If you would like to volunteer to review books, or have a book you would like members to review, please send an e-mail to vccommunications@dpcsig.org.

HAVE A PM QUESTION?

WE JUST MAY HAVE THE ANSWER!



The DPC SIG has enlisted the support of Subject Matter Experts from around the world to address your project management-related questions. Questions and answers will appear in upcoming issues of the DPC SIG newsletter and monthly bulletin.

Submit Your Question

email your question to VCMarketing@dpcsig.org. Be sure to include your name and contact information in the email.

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We're Looking for Contributors to the DPC SIG Newsletter!

We're looking for individuals to contribute articles or news items to the DPC SIG newsletter *The Project Management Standard*:

- Write an article telling us about your experiences with DPC-related projects (PMPs can earn PDUs for articles they have written).
- Contribute an interesting article or news item that you have found.
- Share your knowledge and experiences with others by providing useful tips.
- Direct us to informative PM and DPC-related web sites.

If you would like to provide content for the quarter 2010 issue, please send an email by February 1, 2010 to vccommunications@dpcsig.org.



CALL FOR PRESENTATIONS 2010 PMI® GLOBAL CONGRESS NORTH AMERICA

The PMI Global Congress 2010—North America will be held in suburban Washington D.C. 10 - 13 October 2010. PMI's Professional Development department is looking for communities to nominate speakers for this event. Speakers should represent the "best of the best" with regard to a completed project or topic particularly relevant to the attendees at this congress. Presenting at a PMI Global Congress is an excellent way to network, gain public speaking experience, and gain recognition for your ideas. PMI is looking for speakers who have experience speaking before project managers, but more importantly, speakers who have information to share.

If interested in nominating a speaker for this congress, please complete and return the proposal form no later than 4 January 2010. For questions, please contact jacqueline.kardon@pmi.org.

Upcoming Events



**PMI® Global Congress
Asia Pacific
February 2010**

**PMI® Global Congress
EMEA
May 2010**

**PMI® Global Congress
North America
October 2010**

**PMI Calendar
of Events**

DPC SIG 2009 BOARD OF DIRECTORS

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