

# **Potential Role of 2D - nD Data Models Benchmarking WORKSHOP**

## **CMBG 2016 Conference**

This is your opportunity to SHARE with and LEARN from your CM colleagues the WHAT, HOW and WHY pertaining to the potential role of using multi-dimensional design and engineering data models, such as 'Smart P&IDs', CAD with embedded design data and Virtual 3D plant models as part of your design basis information set as well as for direct work process support.

A model can be more than just a pretty picture. The 3D visualization allows stakeholders to better understand the facility / plant as it comes alive before their eyes. A 4D model looks just like a 3D model, but it contains even more information about scheduling and resourcing. A 5D model looks just like a 3D model, but can include component pricing and costs. Other dimensions could include Plant Program support data to match user needs.

Put this all together and you get the iterative effect of a multi-dimensional Plant Information Model (PIM). Each stakeholder can approach the model with different questions and what-if scenarios and receive near-instant analysis of the situation. The employment of unique leveraged integration processes allows us to progressively increase the intelligence of the data model and support informed decision making from a single source.

**Please bring any information** that you are willing to share on how your organization leverages electronically generated engineering plant data today and any future plans to make this a worthwhile benchmarking opportunity.

To this end, we would appreciate you sharing information about the following:

- Practicality of one versus multiple data models
- Dynamic (evolving) versus static (baselined) model usage
- The value of applying Design Change Processes virtually before implementing them physically
- Models as part of or integrated with your plant MEL
- Use of intelligent P&IDs for Component Tag lists and data visualization
- Dealing with data models versus traditional document records - Impact as 'nuclear records'
- Adoption reluctance even though the technology allows virtual reality?
- What are the obstacles to advancement of virtual plant concepts?
- Experience using the EPRI CM end states to discuss value of advanced CM
- For vendors, have you seen any shifts in nuclear/non-nuclear adoption of advanced data models and what are the key factors?

**Do you have any questions / discussion topics you would like to add to the list above? Please e-mail these to the Facilitators listed below or table them during the session and these will be added to the workshop discussion.**

Thank you.

Facilitators:

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