

HVAC Excellence Workshop
Tuesday, June 3, 8:45-9:05
Bellevue, WA

Thank you, Rob (Graf). Thank you all for coming. Your presence demonstrates a valuable commitment to furthering the success of our program, not just in general but in an area where finding solutions has been challenging, elusive and even contradictory. In this context, we count on your insights and wisdom.

Our Design Excellence Program was initiated in 1994. It has and continues to yield a portfolio of extraordinary projects, including courthouses, office buildings and land ports of entry, by such designers as Harry Cobb, Richard Meier, Thom Mayne, Bill Bain with NBBJ right here in Seattle and many others. It is easy to review these commissions and imagine that all that matters is high profile architecture.

What I want to assure you is that that is not the case. Our vision of Design Excellence is that it embraces the full spectrum of performance issues—not just as compelling architecture but as our buildings function as workplaces, as they support the mission critical needs of our customers, and as they operate efficiently and meet our sustainability goals.

The day-to-day execution and details of each project are managed in the region. Complementing this are strategic guidance and oversight from our Office of Chief Architect and Construction Programs. As the name implies, we regard the buildings we commission as collaborative endeavors where HVAC Excellence is a

critical component in the creative partnerships we seek establish across stakeholders in the design and construction process.

Your input is all the more important as we address mandates of recent legislation, in particular EACT 2005 and the Energy Independence and Security Act of 2007.

The Energy Policy Act of 2005 stipulated that agencies apply, where life-cycle cost effective, sustainable design principles to the siting, design and construction of all new buildings. This included cutting energy consumption by 30 percent from a 1985 baseline.

EISA 2007 is even more far reaching with several aggressive requirements. By 2010, for instance, all federal leases shall be in Energy Star-rated buildings. By the same year, federal agencies shall reduce their use of fossil-fuels by 55 percent compared to a 2003 base year. In addition, further reductions are required in 5 year increments so that facilities use no fossil fuels by the year 2030.

These goals are changing the way we evaluate buildings and building systems. It is an exciting and challenging perspective, one reflected (also per the EISA legislation) in the creation of the PBS Office of Federal High-Performance Green Buildings. This group is headed by Kevin Kampschroer, who is serving as acting director.

Kevin is moving forward with these initiatives:

- Establishing a Federal Green Building Advisory Committee;**

- **Articulating green practices for the operation and maintenance of facilities;**
and
- **Evaluating, in collaboration with the private sector, new sustainable technologies.**

We hope this workshop along with your analysis and counsel will contribute to these efforts.

Another layer in this discussion is our commitment to LEED certification for all new construction, including build-to-suit leases, as well as major renovations.

Ideally, we aspire to a LEED Silver or better rating. At this juncture, 25 of our buildings have this certification, and the numbers are growing.

What we have to ask ourselves is whether this process is giving us and our customers the results we need in terms of building systems performance and energy savings. LEED is a holistic analysis that looks at site, water, energy, materials and indoor environmental quality. In this broad calculus, facilities can be LEED rated without being noteworthy with respect to system performance and effective energy use. Another issue is that LEED ratings are based on facts gathered from design through project completion. It does not depend on any post-occupancy measurements and data collection.

This has led to some surprises. In some cases, as you will hear this morning, we have a LEED certified facility only to discover significant discrepancies between anticipated and actual performance.

On the other hand, a broad study of 12 GSA “sustainable” buildings suggests we are meeting with success overall. Compared to national averages for commercial buildings, the dozen courthouses and federal buildings used 26 percent less energy, had 13 percent lower maintenance costs, 29 percent higher occupant satisfaction and 33 percent fewer CO₂ emissions.

So where do things stand? We want to track general trends. We want to make sure we are going in the right direction. At the same time, we want every sustainable project to fulfill its promise.

As we move from conceptual design through construction, commissioning and actual operation, it is clear there are many important lessons to be learned. I would be disappointed if some of those lessons do not emerge here.

Help us sort out our goals. We need to find ways to facilitate integrated design and true interdisciplinary collaboration. We need to emphasize accountability and share approaches that we know work.

The focus of this meeting is on sustainability, functionality, operability and maintainability. In this context:

- We need clear and specific performance criteria—criteria that will deliver the performance required by EISA 2007.**
- We need strategies that ensure that Design Excellence is inclusive of HVAC Excellence.**

- **We need to identify those LEED criteria that will have the most significant impact on long-term performance, operability and customer satisfaction as a way of focusing our sustainability effort.**
- **We need processes that improve our ability to realize promised LEED performance as they are reflected in actual operation.**

You are here because you are thoughtful and creative. We will be sharing project outcomes where we have done well. We will also be candid about commissions that have not met our aspirations. Please use the arena represented by this dichotomy as the threshold to recommendations and strategies that lead to success.

Tell us how we might do better, how we can get closer to that point where what we expect in design is what we achieve in actual performance.

Again, welcome and my thanks for participating in our workshop.

We have a few moments and I would be please to respond to your questions. After that, I will turn things over to Bill Guerin, Assistant Commissioner for Construction Programs.