



# Energy & Atmosphere Compiled Comments

General		Ensure credits sought during design are implemented during the construction phase and commissioned	All
General		Verify local codes are met in conjunction with ASHRAE/IESNA 90.1-2007 Standard	All
General		Ensure Design Recommendations for credits and Prerequisites do not overlap	All
General		Safety shall not be compromised for sustainability	All
General		Monitor performance and efficiency after commissioning	All
General		Add Heating/Deicing Systems Section	All
General		Add IT & Baggage Handling Systems (BHS) Section	All
General		Add Section to cover 400 Hz, Flood Lighting, Pre-Conditioned Air (PCA), Mobile Bridges, Hydrant Fueling	All
General		Add Smart Panels Section	All
General		Are we on the maintenance side going to have the cooperation of the City's purchasing Dept. to obtain energy efficient items seeing that this is all new and a contract may not be in place?	M. Marich
General		How could be considered ASE (Aircraft Stands Equipments) performances, flood lighting, PCA (Pre-Conditioned Air), and Power (400Hz) into SDM? The latter are all related to energy efficiency and most of the times are out of EA PR 2 & CR 1 scope?	E. Rouverand
General		Suggests including additional project components for Runways as part of the design recommendations section (such as wind socks and illuminated guidance signs).	J. Sisco
General		Suggests including induction lighting as part of exterior lighting.  Added that the O'Hare uses induction lighting on the buildings at the ramps and is also used in the South Cargo Tunnel. Additionally there is a new technology available, an electronically controllable ballast operated through software. It reduces energy usage by 50 percent. O'Hare will be testing this in the near future. Two-three years from now this technology will be readily available.	D. Waterman & J. Sisco

Intro	Xvii	In case a project goes for LEED Certification: a LEED Administrator taking responsibility of the entire certification process is required to register the project and upload templates. In which entity will be this actor, the SRP?	E. Rouverand
Intro + (3.0 & 3.6)	Xvii – xviii	No mention is done in SD review diagram or construction Phase of Commissioning works that are part of EA Prerequisites, and which involve a third party? Does the Green Airplane Certification can be awarded without Commissioning process achieved?	E. Rouverand
3.0 & 3.6	7 & 13	IT systems and BHS systems are generally included in Process loads. Does the only way to promote energy savings in these fields, is to follow exceptional calculation method described in ANSI/ASHRAE/IESNA 90.1-2007 G2 5?	E. Rouverand
3.1 & 3.6		Avoid overlapping design recommendations for Sections 3.1. Prerequisite 1- Fundamental Building Systems Commissioning and 3.6. Enhanced Commissioning.	K. Yenice
3.1		General: Under Section 3.1. Prerequisite 1 revise text pertaining to “pump stations” Reword to make more general (“stations”) since there are other drainage pumps as part of lift stations, etc. Also consider the addition of heating/deicing systems and engine generators.  Suggests that the prerequisite should remain the same and revisions should occur in Section 3.6 Enhanced Commissioning where a point could be achieved.	T.Victorine & K. Yenice
3.1	3	Design Recommendations: Add – illuminated guidance signs	J. Sisco
3.1	3	The intent of this prerequisite is to verify that the project’s energy related systems are installed, calibrated and perform according to the owner’s project requirements, basis of design, and construction documents. Under Current Practices, SDM recommends various systems to be included in Fundamental Building Systems Commissioning that does not meet the intent of this prerequisite. Review the systems included under design recommendations and eliminate the systems that do not meet the intent of this prerequisite. The systems that do not fit the intent of this prerequisite may be included under EA Credit 3.6 for Enhanced Commissioning.	K. Yenice
3.1	4	Design Recommendations: <ul style="list-style-type: none"> <li>• “Pump stations” – reword to pumps as there may be other drainage pumps as part of lift stations, etc.</li> <li>• Consider addition of heating/deicing systems &amp; engine generators.</li> </ul>	T. Lewis

3.2	7	<p>Option 2: Suggest revising reference to the Chicago Code and ASHRAE 2004 in Section 3.2. The Chicago code has additional requirements and exceptions that are not part of ASHRAE 2004.</p> <p>Agrees that the language should be revised to comply with the 2004 standards with some exemptions.</p>	K. Yenice & John Antonoglu
3.2	9	Requirements: Further explain Option 5.	T. Lewis
3.2	10	Current Practices states that the Chicago Building Code currently requires that buildings meet the ASHRAE/IESNA 90.1 2004 Standard. This is not completely accurate since Chapter 13-18 Energy Conservation of Chicago Building Code has additional requirements and exceptions that are not part of the ASHRAE/IESNA 90.1 2004 Standard.	K. Yenice
3.4		<p>Voiced concerns about light sensor activation and safety issues. Lights should not be turned off if it would cause a safety hazard.</p> <p>Agreed with this comment and added that lights for surface parking should remain on and be well lit.</p>	K. Yenice & M. Marich
3.4		Can add text regarding parking lots	J. Antonoglu
3.4	20	Requirements: LED lighting to be used for all taxiways, add “as part of Chicago Airport System”.	T. Lewis
3.4	20	Statement “Current FAA requirements dictate that all runway lights must be incandescent”: There are some approved LED lights for certain runway applications as well as other airfield components such as wigwags, signs,	T. Lewis
3.4	20	Option 4: Revise the text on page 20 pertaining to FAA requirements dictating that all runway lights must be incandescent. There are some approved LED lights for certain runway applications as well as airfield components such as wigwags and signs.	T. Victorine
3.4	22	Option 5: Credit for “light sensor activation for roadway, parking or pedestrian lighting” needs to be reviewed by the design team and the owner to assure that safety of public is not compromised.	K. Yenice
3.4	22	Technology/Strategy: Add to the table Electronically controlled ballasts (Energy Savings), runway distance remaining signs, runway guard lights, obstruction lights, lighted wind socks, or any L.E.D. approved for use by the FAA for Airfield use.	J. Sisco

		<p>The following are examples of what we are testing at O’Hare:</p> <ol style="list-style-type: none"> <li>1) L.E.D. Stop Signs – Patton Drive &amp; Post 12</li> <li>2) L.E.D. Distance Remaining Signs – 9R/27L &amp; 4R/22L</li> <li>3) L.E.D. In-Surface Fixtures – Alpha Center Line &amp; Bravo Bridge</li> <li>4) L.E.D. Obstruction Lights – Military Water Tower &amp; Most of the Pump Lift Stations</li> <li>5) L.E.D. Taxiway Lights – Sierra Taxiway &amp; Kilo Taxiway</li> <li>6) L.E.D. Traffic Signals</li> </ol>	
3.4	22	Current Practices states that the Chicago Building Code currently requires that buildings meet the ASHRAE/IESNA 90.1 2004 Standard. This is not completely accurate since Chapter 13-18 Energy Conservation of Chicago Building Code has additional requirements and exceptions that are not part of the ASHRAE/IESNA 90.1 2004 Standard.	K. Yenice
3.4	23	Under Design Recommendations SDM recommends using the more current ASHRAE/IESNA 90.1-2007 to be used for buildings. It should be noted that some parts of ASHRAE/IESNA 90.1-2007 cannot be adopted for use in building projects in Chicago due to the conflicting requirements in Chapter 13-18 Energy Conservation of Chicago Building Code.	K. Yenice
3.4	23	Design Recommendations: Solar lights	T. Lewis
3.5	24	Requirements: Clarify Credit 7.4 by adding the following “for Innovation and Design Process” after Credit 7.4.	K. Yenice
3.5	25	<p>Current Practices:</p> <ul style="list-style-type: none"> <li>• Solar powered RPU for weather sensors was previously considered on other projects &amp; is part of current design.</li> <li>• Solar powered obstruction lighting (considered &amp; possibly implemented – need to verify).</li> <li>• Barricade lights.</li> </ul>	T. Lewis
3.6	29	Design Recommendations: Coordinate Design Recommendations of this Credit with EA prerequisite 3.1 to eliminate overlapping of the systems that are part of Fundamental Building Systems.	K. Yenice

# CASE STUDY SUGGESTIONS

From All:

- Logan Architectural Wind Turbines:
  - [http://groomenergy.com/files/GES\\_turbines.pdf](http://groomenergy.com/files/GES_turbines.pdf) - we also have a hard-copy if needed