Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
ab	Adds a filled cavity metal building roof assembly (R-19+R-11) to Appendix A.	ENV	Low	
ac	Allows the use of the R-value of an airspace in enclosed cavities with or without insulation (appendix A). Expands the R-value table in Appendix A (based on Chapter 26 of the 2009 Handbook of Fundamentals).	ENV	Low	
ak	Addresses number of issues with hydronic section (6.5.4.1) including removal of the pump power threshold, limiting section 6.5.4.1 to heating and cooling hydronic systems only, lowering and rephrasing the flow limit exception, and other changes.	MSC		

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
bm	Allows the use of Appendix G as compliance path. Formulates methodology for showing compliance with 90.1.	ECB		
du	Requires water-side economizers for chilled water systems including non-fan systems, such as radiant cooling or passive chilled beam systems.	MSC	Moderate	
dx	Adds changes to from pending addenda to 90.1-2010 (addenda co, cr, dl)	ECB/LSC	Low	
a	Updates the definition of conditioned space and modifies the heated space criteria table.	ENV	Low	
c	Specifies combined maximum voltage drop (5%) for branch (3%) and feeder (2%) circuits instead of specifying separate voltage drops for each.	LSC	Moderate	Could impact design and construction cost with poor economics in Lightout? Facilities

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
d	Requires deeper thermostat setback for networked guestrooms or those unoccupied for more than 16 hours. Also requires ventilation to be turned off when guestrooms are unoccupied.	MSC	None	Not applicable
e	Increases requirements for alterations to existing building lighting systems.	LSC	Moderate	Could impact design and construction cost with poor economics in Lights out Facilities
f	Changes an exception to the automatic daylight control requirements for daylight areas under skylights from VT to effective apperture.	LSC	Low	
g	Clarifies interpretation of the equation used for pressure drop adjustment calculation for energy recovery devices.	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
h	Modifies the language in Appendix C to separate fan power from the cooling and heating efficiency calculation.	ENV	Moderate	Could impact design of new systems and limit designs in existing systems
i	Eliminates separate cooling capacity thresholds for requiring economizer in computer rooms. Computer rooms will be required to follow same thresholds as comfort cooling applications.	MSC	High	Economizers required under presciptive path except climate zones 0 and 1.
j	Requires VAV system ventilation optimization even when ERV is installed.	MSC	Low	
k	Requires opaque assemblies in the baseline building to match the descriptions in Appendix A.	ECB	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
L	Adds verification requirements for envelope components, including insulation, fenestration, doors, and air leakage.	ENV	Low	
M	Adds text in Section 10.4.1 on electric motors to state the tables that must be followed based on size and type (Tables 10.8-4 and 10.8-5).	MSC	Low	
N	Updates IEER values for air-cooled VRF air conditioners and heat pumps above 65,000 Btu/h. The new IEERs are between 15% and 20% more stringent and become effective on January 1, 2017.	MSC	Low	
O	Clarifies the wording regarding duct seal class by removing text to avoid any possible misinterpretation.	MSC	Moderate	Could add significant construction cost to high density Data Centers with Ducted HVAC Systems

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
p	Adds reference to Cooling Tower Institute Standard CTI STD-201 RS for testing certain equipment types in Table 6.8.1-7.	MSC	Moderate	Could limit system choices and add cost
q	Only allows the following systems to use the fan power allowance for fully ducted return and/or exhaust systems: systems required to be fully ducted by code or accredited standards, and systems required to maintain air pressure differentials between adjacent rooms	MSC	Moderate	Poteintal added construction cost for air side soltions
r	Clarifies the hierarchy for selecting baseline HVAC systems, including what floors to count, and specify what building type to use when no one use is predominant.	ECB	Moderate	Added design and poteintail construction cost when Modeling compliance path is sellected.

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
s	Relieves parallel fan powered box and DOAS with DDC from requirements c & d in exception 2 of Section 6.5.2.1.	MSC	Moderate	Could complicate airside system designs when humid climate zones and air economizer requirements co-exist.
u	Improves wording of transfer air by applying it more broadly than to just kitchen exhaust systems, and also by clarifying the sources of transfer air.	MSC	Not applicable to Data Centers	
v	Deletes exception 2 of the fenestration orientation requirement for obstrucions to south facing glazing.	ENV	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
w	Refers 90.1 to new climatic data based on Standard 169-2013 resulting in changes to climate zone assignments for some locations, the creation of a new climate zone 0, and the addition of criteria for climate zone 0. ISC: Adds method for rating the SRI of walls with glass spandrel area and adjusts criteria for minimum skylight area in climate zone 0.	ENV	Low	Economizer requirements could have changed
Z	Modifies modeling of electric auxiliary heat in air-source heat pumps such that they are controlled by an outdoor air thermostat and the heat pump continues to operate while the auxiliary heat is energized.	ECB	Not applicable to Data Centers	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
AA	Clarifies which spaces in the proposed design can be modeled without mechanical cooling (Appendix G).	ECB	Not applicable to Data Centers	
AD	Specifies baseline systems 5 through 8 to be modeled with a preheat coil.	ECB	Low	
AE	Updates definition of nameplate horsepower, and relates power ratings of smaller electric motors to their output power. Changes are editorial in nature.	MSC	Low	Follows Federal mandate
AF	Specifies the rating conditions for measuring the efficiency of heat pump pool heaters.	MSC	Not applicable to Data Centers	
AG	Limits mechanical cooling to 85 F for vestibules, except when the vestibule is tempered with transfer air or heated with recovered energy.	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
AH	Clarifies that all lighting, including egress lighting on emergency circuits, shall be turned off when the space is unoccupied with 0.02 W/sf in exception	LSC	Low	
AI	Prescribes lower SHGC for vertical fenestration in climate zone 0 and lower U-factors for vertical fenestration in climate zones 4 through 8.	ENV	Low	
AJ	Requires return and relief fans larger than 0.5 hp to have VFD control, to maintain building pressure, and to avoid disabling of economizer operation	MSC	Low	
AL	Prescribes air leakage criteria for metal coiling doors in semi heated spaces	ENV	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
AM	Increases the parking garage lighting reduction from 30% to 50% in response to no occupancy, specifies a 50% reduction in lighting power in response to the presence of daylighting, and removes a duplicate exemption.	LSC	Low	
AN	Removes mandatory local control from restrooms and stairwells.	LSC	Low	
AO	Requires humidification systems in the baseline building model to be non-adiabatic in buildings where humidification is required.	ECB	High	Impact when using the Modeling paths

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
AP	Moves the minimum 5 hp threshold for fan power to individual requirements under 6.5.3 as applicable. Clarifies that fan motors smaller than 1 hp have separate requirements. Clarified that fan power allowance does not apply to relief fans that opperate only during economizer mode.	MSC	Moderate	Impact on air system design
AQ	Updates footnotes in Tables 6.8.1-1 and 6.8.1-2 and 6.8.1-5 to state that residential air conditioners, heat pumps, and furnaces are now regulated by the US Department of Energy and not by NAECA. Clarifies that certain efficiencies in the tables only apply to three-phase equipment.	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
AR	Replaces "energy recovery effectiveness" with "energy recovery ratio," which clarifies the intent of the Standard with regard to the performance requirements of air-to-air heat exchangers.	MSC	Low	
AS	parking lot occupancy controls	LSC	Low	
AT	daylight calibration	LSC	Low	
AU	Appendix G Water pumps	ECB	Moderate	Impact on air system design
AV	mechanical "configured to"	MSC	Low	
AW	exhaust air energy recovery exemptions	MSC	Low	
AY	roof membranes	ENV	Low	
AZ	Appendix G fenestration and skylights	ECB	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
BA	G1.2.2 end use load note to mandatory	ECB	Moderate	Impact on air system design
BB	included fan energy	ECB	Moderate	Impact on air system design
BC	opaque doors	ENV	Low	
BD	chiller plant metering	MSC	Moderate	Increased design and construction cost
BH	Digital control display	LSC	Low	
BI	ventilation air heating control requirements	MSC	Low	
BJ	chilled water coil selection	MSC	Moderate	Increased design and construction cost. Potential equipment limitations
BK	Specifies control of fans in fan powered parallel VAV boxes	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
BL	Clarifies that water economizers may use dry coolers	MSC	Has some benefit for Data Centers	
BN	Sets maximum OA ventilation design requirements for heat recovery	MSC	Low	
BO	shading protection factors	ENV		
BP	Modifies App G economizer high limit shutoff	ECB	Low	High Humidity could be a risk if using modeling for compliance.
BQ	Sets baseline control requirements for Systems 6 & 8 (FPTU) in Appendix G.	ECB	Low	
BR	Adds requirements for new climate zone 0	MSC	Low	Rquirements are similar to Climate zone 1. No Economizer requirements.
BS	water cooled VRF efficiencies	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
BT	transformer efficiency requirements	MSC	Moderate	Aligns Standard with US Federal requirements.
BV	ECB hydronic reset exceptions for purchased heating and cooling	ECB	Moderate	
BW	Appendix G lighting controls modeling rules	ECB	Low	
BX	Appendix G design airflow rate modeling rules	ECB	Moderate	Could be problematic in higher density applications when modeling is used for compliance.
BY	domestic hot water branch insulation	MSC	Low	
BZ	CRAC Unit efficiencies	MSC	Low	
CA	Reduces the threshold for variable flow heat rejection device fans from 7.5 to 5 hp. Eliminates the exception for CZ1 & CZ2	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
CB	ductwork insulation	MSC	Low	
CC	Adds defintion for sidelight affective aperture	ENV	Low	
CD	Establishes a product class and efficiency requirements for DX-DOAS	MSC	Low	
CE	Raises minimum threshold for energy recovery	MSC	Low	
CF	Requires replacement HVACR equipment to meet most chapter 6 requirements.	MSC	High	Could be very problematic and costly
CG	Exterior lighting requirements made more stringent	LSC	Low	
CH	Reduces LPD allowances	LSC	Low	
CI	Fenestration orientation	ENV	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
CJ	Appendix G System 11 footnote to Table G3.1.1.2	ECB	Low	
CK	Appendix G heat rejection leaving water temperature control modeling requirements	ECB	Low	
CL	Moves water heating efficiency requirements to informative Appendix H	MSC	Low	
CM	Clarifies and simplifies the default U-factors within appendix A for wood panels and wood sub-floors, corrects the dimensional lumber sizes in the tables, and re-organizes the material list by putting similar materials together.	ENV	Low	
CN	Adds Climate Zone 0 in Table 4.2.1.1, Building Performance Factors for compliance with Appendix G.	ECB	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
CO	Normative Reference update	F&C		
CP	Metal Building walls	ENV		
CQ	service factor heat rejection thresholds	MSC		
CT	Changes water economizer to fluid economizer to account for refrigerant based economizers	MSC	Supported by TC9.9	
CV	Updates motor efficiencies	MSC		
CY	Adds definition for indoor pool dehumier and moisture removal efficiency (MRE). Adds new table with efficiency requirements and rating conditions.	MSC	N/A	No Risk
CZ	datacenters/90.4	MSC	Not included in 90.1-2016	No clear seperation between 90.1 and 90.4. Each AHJ governs.

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
DA	Establishes modeling rules for existing buildings in Apendix G	ECB	Low	
DB	Building official definition and other language clarifications	ECB	Low	
DC	Update reference to Standard 55 in Appendix G	ECB	Low	
DD	Reduces the threshold for variable flow pumping requirements for chilled water pumps and add requirement for heating water pumps	MSC	Moderate	Could pose issues when making changes to existing data centers.
DE	Requires specification of ISO using categor and energy efficiency class for elevators	MSC	Low	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
DG	Establishes leakage requirments for glazed power operated sliding and folding doors. Provides default U-factors for unlatbled metal coilding and other metal non-swining doors.	ENV	Low	
DH	Clarifies that display lighting adder cannot be taken if display lighting exception is taken.	LSC	N/A	
DI	Adds new table for motor efficiency for Appendix G baseline.	ECB	Low	
DK	Clarifies metal building wall insulation descriptions	MSC	N/A	
DP	Adds exception to restriciton on automatic energizing of lighting for open office spaces	LSC	N/A	
DQ	Reduces retail display lighting adder	LSC	N/A	

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
DR	Reduces decorative lighting adder	LSC	N/A	
DS	Specifies daylighting controls adjustment location	LSC	N/A	
DV	Clarifies metal building wall insulation descriptions	ECB	N/A	
DY	Updates the reference to Standard 140	full SSPC	Low	
dz	Clarifies metal building wall insulation descriptions	ENV	N/A	
ea	Clarifies the definion and application of wall and exterior wall in various locations in the standard.	ENV	Low	
ec	Corrects an error in Building Performance Factor Table.	ecb	N/A	
ed	Adds three baseline system types to the rules governing dehumidification in Appendix G	ecb	Moderate	May have conflicts with existing systems when upgrades occur.

Addendum	topic	Subcommittee	Level of Risk to Data Center	Potemtial Risk
eg	Removes a caveat in Appendix G that airside economizers can be modeled if the simulation software does not model waterside economizers.	ecb	Moderate	Increased design and construction cost
ej	Add a defintion for driver as it relates to LED fixutures and makes several changes to assure lighting requirements apply to LED fixtures	LSC	Low	
ek	Sets baseline efficiency requirements for refrigeration system modeling in Appendixi G.	ecB	Not applicable to Data Centers	
eL	Adds fault detection requirements for DX equipment with economizers.	msc	Low	