October 9, 2022

Dear ICC Governmental Member Voting Representatives,

As grid reliability experts, companies, and key stakeholders in the clean energy industry, we write to communicate our deep concern regarding a proposed change to codes that could negatively impact the deployment of job-creating clean energy projects nationwide. Non-utility-owned large-scale photovoltaic (PV) facilities and most wind turbine generator systems (WTGS) are permitted and inspected through local County building departments, using the International Building Code (IBC) as the locally adopted construction code applicable to these non-building structures. A code change proposal under consideration for the future 2024 IBC would significantly affect the deployment of PV and wind facilities by unnecessarily driving up construction costs without achieving its intended benefit of grid resiliency and reliability. **For the reasons stated below, the signed organizations request your vote for disapproval of Proposal S76-22 and as further detailed below.**

The Federal Emergency Management Agency (FEMA)'s Applied Technology Council Seismic Code Support Committee (FEMA-ATC SCSC) submitted Proposal S76-22, which increases the structural Risk Category (RC) of most ground mounted large-scale solar and wind projects to the same RC as Essential Services Facilities (including hospitals, fire stations, and police stations). FEMA-ATC SCSC believes that increasing structural loads on all "public utility facilities providing power generation" will achieve increased reliability of the grid, resulting in fewer power outages. However, Proposal S76-22 is written by structural engineers, not grid reliability experts with experience in the core factors of grid resiliency and the interaction of the power generating facility and transmission and distribution systems; both of which are unrelated to structural design loads.

Approximately 95% of large-scale ground-mounted PV facilities are designed, permitted, and inspected as RC I (one). FEMA Proposal S76-22 would increase the RC to IV (four), thereby increasing required wind loads by roughly 33 percent and seismic and snow loads by roughly 50 percent. For hurricane-prone regions or regions with high snow loads, this means projects could be deemed economically unviable; mainly due to a lack of PV modules tested and rated for those higher loads and also for increased equipment needed.

Additionally, nearly all wind turbines in the U.S. are designed and permitted to RC II (two), based on to ASCE/AWEA Recommended Practice RP2011. An increase to RC IV would increase extreme wind design loads for turbines by a minimum of 20% and increase seismic design loads by 50%. These changes will result in limits on the ability to transport the required larger tower sections given road, rail and bridge height and weight constraints. It could also create artificial constraints on the height of wind turbines, thus decreasing the electricity they generate, which undermines project economics and will result in facilities not being built. The wind industry expects that the proposal would only increase the amount of construction material needed for wind turbines and therefore overall cost by 30% or more, without the actual increase in grid power resilience it promises.

The net effect of Proposal S76-22 would be the opposite of the stated intent. Grid reliability and grid recoverability are not based on the survivability of structures, but on grid planning and redundancy. Since grid reliability is already under the auspices of the North American Electric Reliability Corporation (NERC), its regulatory forum is where such integrated considerations should also be debated. Their expert opinions and research should be consulted along with industry stakeholders and AHJs with broad and deep experience in these topics.

October 9, 2022

As companies and stakeholders that employ the clean energy workforce and deploy renewable technologies including solar, wind, and storage to enable a clean energy economy, the undersigned strongly encourage ICC Governmental Member Voting Representatives to vote as follows:

- **DISAPPROVAL ON FEMA-ATC SCSC PROPOSAL S76-22**
- **APPROVAL ON SEIA PROPOSAL S79-22 AS MODIFIED BY PUBLIC COMMENT 1**
- **APPROVAL ON SEIA PROPOSAL S81-22 AS MODIFIED BY PUBLIC COMMENTS 3 AND 4**

We thank you for your support.

Sincerely,

Abcam, Inc
Acciona Energy USA Global
Advanced Green Technology
Aerocompact
AES Clean Power
Alchemy Renewable Energy
All Bright Solar
Alternative Energy Southeast
Altis Energy Services LLC
Ambor Structures
American Energy Care
Ames Construction
ANS Geo, Inc.
Apex Clean Energy
Arch Electric, Inc.
Arevon
Armadillo Power
Array Technologies,Inc
Aspen Power Partners
Aurora Solar
Avantus
Bayside Energy Solutions
BayWa r.e. Solar Systems LLC
Bergey Windpower Co. LLC
Black & Veatch
Blattner Energy, Inc.
Bluestem Energy Solutions
BlueWave Solar
Boiler Burner Control Inc.
Borrego Energy
BrightNight, LLC
Brown & Brown Inc.
Buffalo Renewables Inc
Buglet Solar Electric
California Solar and Storage Association (CalSSA)
Canadian Solar USA, Inc.
Carter Wind
CDL Electric
CEP Renewables LLC
CHINT Power Systems
Clean Energy for America
Clearway Energy Group
Cloudbreak Energy Partners
Conductor Power Renewables
ConnectGen LLC
Convergent Systems, LLC
Copia Power
CPP Wind Engineering
CS Energy
CSI Electrical Contractors, Inc.
Cygnus Solar Power
Cypress Creek Renewables
D.H. Blattner and Sons
Daly Energy
DC Solar Services
Distributed Solar Development
Distributed Sun LLC
DNV Energy USA, Inc.

Doral Renewables
Ducted Wind Turbines, Inc.
Ecogy Energy
EDF Renewables
EDP Renewables North America
Elders Climate Action Southern California
Enel Green Power North America, Inc.
Energy Intelligence Partners
Energy Project Solutions
Energy Toolbase LLC
ENGIE North America
Eocycle America Corp.
ESA Solar
Esdec BV
EVS, Inc.
EWT, Americas
Excite Energy
First Solar
FCX Solar
ForeFront Power Development, LLC
FTC Solar, Inc.
GameChange Solar
GE Vernova
General Electric Company
General Stamping & Metalworks
Glenvale LLC
Good Steward Consulting
Grand Solar, Inc.
Greentech Renewables
Hanwha Q CELLS America Inc.
Harmony Energy Solutions
Hecate Energy
Horus Renewables Corp.
HS International
HST Technologies
ibV Energy Partners
Idemitsu Renewables
Impact Power Solutions
Incident Management Solutions
Industrial Sun
Intergrid, LLC
Intersect Power
Invenergy LLC
JE Dunn Construction
Jh Solar Consulting
Juwi Inc.
K2 Systems LLC
Kensington Vanguard National Land Services
Keramida Inc.
Keystone Tower Systems
Kiewit
Kimley-Horn
Kleinfelder Inc.
Large-Scale Solar Association
Leeward Renewable Energy
Lightsource bp
Live Oak Banking Company
Lockton Companies, LLC - Pacific Series
M. A. Mortenson Company
Maffei Structural Engineering
McCarthy Building Companies, Inc.
Meteoswift
Mill Creek Renewables
Modern Energy LLC
Mortenson
Moss & Associates LLC
MotorDoc LLC
Mynt Systems
Natural Power Company
Nautilus Solar Energy, LLC
NEI Electric Power Engineering, Inc.
Nexamp, Inc.
NextEra Energy
Nextracker, Inc.
NoBull Energy
Nokomis Energy LLC

NOV
Oasis Montana, Inc
OBXtroniX
OMCO
OneEnergy Renewables
Onyx
Opsun Systems Inc.
Orange Mountain Energy
Oriden
Orsted
Paces
PanelClaw, Inc
Pattern Energy
Pecos Wind Power
Photon Vault
Pine Gate Renewables, LLC
Planet Plan Sets LLC
POWER Engineers, Inc.
Precision Systems Engineering
Primergy Solar
Primoris
Pure Power Contractors Inc.
PV AMPS
PV Evolution Labs
PV Hardware Solutions S.L.U.
QUANTA
Quanta Services
Radian Generation
Rayne
ReneSola Power Holdings, LLC
Renewable Energy Services LLC
Renewable Energy Systems
RES (Renewable Energy Systems)
Revamp Engineering, Inc.
Robinson, Inc.
Roof Tech, Inc.
Rosenblum
Rosendin Electric, Inc.
rPlus Energies
RRC Power & Energy, LLC
RWDI
RWE Renewables Americas
S-5! Metal Roof Innovations, Ltd
Safari Energy
SALT Energy
San Francisco Department of Environment
Sargent & Lundy LLC
Savion, LLC
SB Energy
Schultek Construction
Scout Clean Energy
Sea Bright Solar
Signal Energy
Sigora Solar
Silicon Ranch Corporation
SimpleRay, LLC
Sofos Harbert Renewable Energy
Sol Focus
Sol Systems LLC
Solamerica Energy, LLC
Solar Energy Industries Association
Solar Energy International
Solar FlexRack
Solar Landscape
Solar PowerWorks, Inc.
SOLV Energy
Sonnedix Kingbird, Inc
Southern Current
Star Power Systems, LLC
Starling RFS
Stellar Renewable Power
Stem, Inc.
Steven Quade Consulting LLC
StraightUp Solar
Strata Clean Energy
Summit Ridge Energy
Sundt Renewables

SunEnergy1 LLC
Sunfolding
SunModo Corporation
SunPower Corporation
Sunrun
T A Somers Electrical
Target
TC Energy
Technical Creative
Tenaska
Terabase Energy
Terra-Gen
Terracon Consultants, Inc.
Terrasmart
Tesla
TMEIC
TotalEnergies Renewables USA, LLC
TPI Composites, Inc
TrackerSled
TRC
ULCG
Ulteig Engineers, Inc.
Unirac, Inc.
Ventoco Services Group, Inc.
Vestas American Wind Technology, Inc.
WECS Renewables
Western Land Services, Inc.
Westwood Professional Services, Inc.
Wind Advisors Team
Wind Harvest International
WindSolarUS, Inc.
Windurance, LLC
Wood PLC
Xcel Energy
XFlow Energy
XL Fleet