Effective immediately the Division of Building Safety (DBS) is asking contractors to voluntarily participate in a plan review process for all Solar Photovoltaic (PV) installations prior to beginning the installation. There is no additional charge for this plan review; the cost is included in the electrical permit fee for the installation.

DBS is instituting this new plan review program in response to the recent surge in the number of PV installations being installed in Idaho, and in recognition of the significant percentage of new installations requiring costly corrections prior to being approved for operation. Several large projects have required major modifications that would have been recognized and avoided had a plan review process been in place. Contractors have incurred significant additional costs and time delays inherent in making required corrections after installation. An early plan review will result in reduced costs to contractors and homeowners, will avoid project delays and will allow DBS to verify installation requirements on paper, before the work is started thereby avoiding the need for work to be corrected in the field.

Once the project plans are approved and in compliance with the National Electrical Code (NEC), the installation can be performed. As noted earlier, this plan review service will be provided at no extra cost to the contractor or permit holder.

In order for the plan review process to operate efficiently, contractors should provide DBS the permit number, job name, job address, contractor license number and email address of the organization’s employee who will be responsible for supplying DBS with required documents. This information should be emailed to warren.wing@dbs.idaho.gov. DBS will respond to the responsible employee with information inviting them to participate in the agency’s electronic plan review process.

Once invited to a project, it will be necessary for the designated employee to upload the following items:
- A completed DBS Solar Photovoltaic Checklist
- A single-line diagram to include all calculations defined in the PV checklist. Overcurrent protective device sizes, conduit sizes with wire fill, wire sizes, wire type will be required.
- A detailed site map, to include location of all equipment.
- Copies of manuals and specification sheets for all equipment to be installed.

Upon completion and approval of submitted plan review the following inspections will be required:
- A “rough in” will be necessary prior to installation of equipment. This will allow the inspector to verify the equipment being installed matches that submitted during the plan review process.
• A “final” will be required in order to verify that the equipment was installed as submitted in the plan review and that it complies with the NEC.
• The contractor or a contractor’s representative may be required on site during the final inspection to open equipment, prove system safety functions and provide access to the property and the PV system.
• A copy of the approved plan review must be kept on-site and shall be made available to the inspector.

**Contractors who choose not to participate in the voluntary plan review process will be required to submit the following by email to warren.wing@dbs.idaho.gov prior to a final inspection:**

- The permit number
- The job name and physical address
- The contractor’s license number
- The name and email address of the person responsible for providing DBS required documents

The person responsible for providing required documents will be sent an email with instructions and an invitation to a project in our electronic plan review system. Once they’ve successfully joined a project, the designated person will be required to upload the following items:

- A completed DBS Solar Photovoltaic Checklist
- A one-line diagram to include all calculations listed in the PV checklist
- Overcurrent protective device sizes, conduit sizes with wire fill, wire sizes and wire type
- A site map to include the location of all equipment
- Copies of manuals and specification sheets for all equipment being installed

All submissions will be reviewed by an inspector to ensure compliance with the NEC. A final inspection will not be conducted until all installation documents are approved. At the time of final inspection the contractor or a designated employee may be required to be on-site to open equipment, demonstrate system safety functions, provide required access to the property and elements of the system. A copy of all approved documentation must be made available to the inspector at the time of final inspection.

It is the goal of the Division of Building Safety to make all electrical installations in Idaho safe for workers, property owners and our employees. We sincerely ask for your help and cooperation in achieving this goal. Please contact us if you have any questions or concerns regarding the new Solar Photovoltaic Plan Review policy and inspection procedures.

**Warren Wing**
Electrical Program Manager
Idaho Division of Building Safety
Phone: (208) 332-7147
warren.wing@dbs.idaho.gov