

MAR 02 2012

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# SENATE CONCURRENT RESOLUTION

ENCOURAGING SINGLE-FAMILY RESIDENCE BUILDERS TO CONSIDER CERTAIN  
FACTORS THAT WILL FACILITATE INSTALLATION OF PHOTOVOLTAIC  
SYSTEMS WHEN CONSTRUCTING AND DEVELOPING SINGLE-FAMILY  
RESIDENCES.

1           WHEREAS, the installation of photovoltaic systems on  
2 existing structures can be hindered by initial construction  
3 design features that limit the physical space available for  
4 installation of photovoltaic systems and related equipment; and  
5

6           WHEREAS, Act 198, Session Laws of Hawaii 2011, established  
7 a working group to study the feasibility of requiring all new  
8 single-family residential construction to incorporate design  
9 elements to make the structure photovoltaic-ready at the time of  
10 initial construction; and  
11

12           WHEREAS, the working group considered strategies for  
13 facilitating the widespread adoption of photovoltaic systems  
14 including:  
15

- 16           (1) Incorporating specific design elements in new  
17 residential structures to make the structures  
18 photovoltaic-ready;  
19
- 20           (2) Minimizing retrofitting and equipment installation for  
21 future photovoltaic accommodation;  
22
- 23           (3) Labeling blueprints with details of photovoltaic  
24 system accommodations and connections; and  
25
- 26           (4) Identifying areas in the State where the use of  
27 photovoltaic systems would be impractical or where  
28 other renewable energy resources are more readily  
29 available; and  
30



1           WHEREAS, after considering strategies, discussing relevant  
2 issues, and investigating alternatives, the working group  
3 determined that technology advancement could ultimately render  
4 obsolete a policy mandating the incorporation of design elements  
5 to make structures photovoltaic-ready at the time of initial  
6 construction; and

7  
8           WHEREAS, a policy mandating the incorporation of design  
9 elements to make structures photovoltaic-ready at the time of  
10 initial construction could ultimately result in relatively  
11 little cost savings depending upon the choices of developers and  
12 consumers; and

13  
14           WHEREAS, the working group recommends against a policy  
15 mandating incorporation of design elements and minimal equipment  
16 installation to make structures photovoltaic-ready at the time  
17 of initial construction; and

18  
19           WHEREAS, despite the working group's recommendation,  
20 certain factors should be considered during the construction of  
21 single-family residences to facilitate the installation of  
22 photovoltaic systems in the future; now, therefore,

23  
24           BE IT RESOLVED by the Senate of the Twenty-sixth  
25 Legislature of the State of Hawaii, Regular Session of 2012, the  
26 House of Representatives concurring, that single-family  
27 residence builders are encouraged to consider certain factors to  
28 facilitate installation of photovoltaic systems when  
29 constructing and developing single-family residences, including  
30 whether:

- 31  
32           (1) A structure has a south-facing roof orientation with a  
33 slope of approximately twenty-two degrees for good  
34 solar exposure;
- 35  
36           (2) A structure's roof area is adequate to accommodate  
37 multiple solar uses, such as solar water heating and  
38 photovoltaic energy systems;
- 39  
40           (3) The structural integrity is adequate to accommodate  
41 photovoltaic panels and counteract wind loading, also  
42 known as up-lift;
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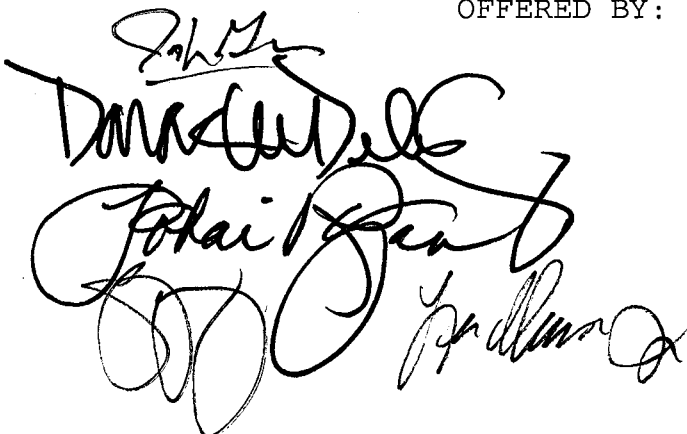


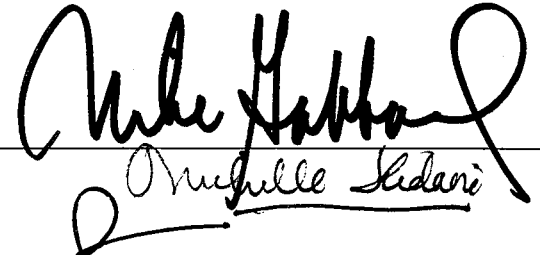
- 1 (4) A structure's blueprints are labeled with photovoltaic
- 2 system components;
- 3
- 4 (5) A structure's electrical panel capacity is sufficient
- 5 to accommodate the total power coming into the
- 6 building from all sources, including power from the
- 7 electric utility grid and photovoltaic energy;
- 8
- 9 (6) A structure's electrical panel location is convenient
- 10 for photovoltaic system interconnections;
- 11
- 12 (7) A structure's electrical panel contains adequate space
- 13 to house a photovoltaic circuit breaker;
- 14
- 15 (8) A structure has an electrical conduit that connects
- 16 the most appropriate solar collection location to the
- 17 electrical panel and other relevant electrical
- 18 components; and
- 19
- 20 (9) The combination of design and orientation of the
- 21 structure precludes production of power from a
- 22 photovoltaic energy system that will fully satisfy the
- 23 structure's electrical load requirements; and
- 24

25 BE IT FURTHER RESOLVED that certified copies of this  
 26 Concurrent Resolution be transmitted to the mayors of each  
 27 county and the directors of the respective county building  
 28 departments.

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 30  
 31

OFFERED BY:





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