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Planning a safe journey

Have you ever wondered what makes a aircraft safe to fly?

Think about the planning, testing and building of a aircraft.

Would you fly in a aircraft that used the planning methods that the Energy Commission uses in its energy policies?

Additional submitted attachment is included below.

In the matter of the California Energy Commission 2018 Integrated Energy Policy Report Update (2018 IEPR Update).

Planning a safe journey

Have you ever wondered what makes a aircraft safe to fly?

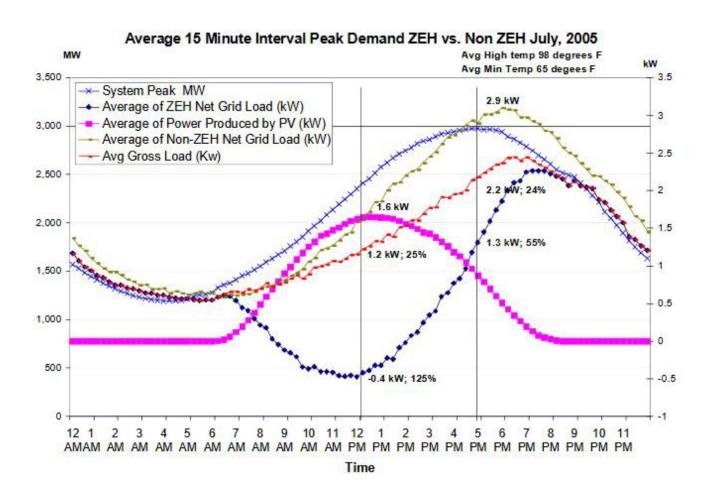
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Seeing things

Anyone see a duck here?

PV/ZEH Load Compared To System Peak



You can find the above "Zero Energy Home" chart on the Energy Commission's site.

Can you find a duck in this model?

A good planning system should not under represent key metrics (performance indicators).

A good planning system should help you validate key performance indicators before you execute the plan.

Under represented communities

Does the planning methods the Commission uses clearly represent the communities of the State of California?

How easily can communities identify themselves and what you expect from them in your plans and policies?

Product structures should use uniform identification of the players, major components and supporting pieces.

Plan, Do, Check

All planning should be progressed in real-time, this will allow continuous improvement to be timely.

All reporting should be open and fluid, hyperlinking to more detail as needed.

Presentations should be avoided, they have to be presented with additional dialog to be understood.

A complete plan should disclose all costs, constraints and critical paths before discussing ideas at meetings.

No one should have to ask about costs at workshops or other meetings, disclose costs beforehand.

Graceful degradation

Plan for failure, don't just make something that works, make something that is proven to be hard to make fail as a system.

When looking to change a process or policy within a system, don't leave out the life boats because you think the new process or policy will be unsinkable. Identify the safety features prior engineers relied on for their systems that your process or policy change will remove.

Belt and Suspenders

All planning systems should be crosschecked, this is often best done by someone that doesn't agree with the methods of the system to be crosschecked. Stop confirmation bias.

I like this view on crosschecking in this video, scientifically prove the value of a system.

Don't assume

Here is an example of a assumption that appears to of lead to installing inverters that are now referred to as "dumb inverters". See bottom of page 67 where it says "No fault analysis was performed for the PV solar generation. It is assumed this generation will not contribute significantly to faults because the inverters will cease to switch or will limit the current to slightly above normal.".

Untapped tools

It appears that Material Resource Planning (MRP) is unused at the Energy Commission.

The lack of a uniform identification system for the electric power system will continue to slow progress and increase costs in meeting climate goals.

The Energy Commission appears to be thirty years behind where they should to be in resource planning skills.

Make the change,

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