

Forward Effective Load Carrying Capability - A Reasonable Compromise

Brock Ondayko

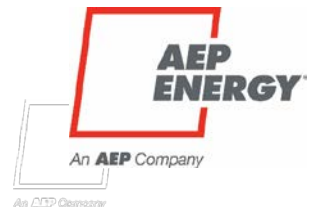
Auwahi Wind Farm

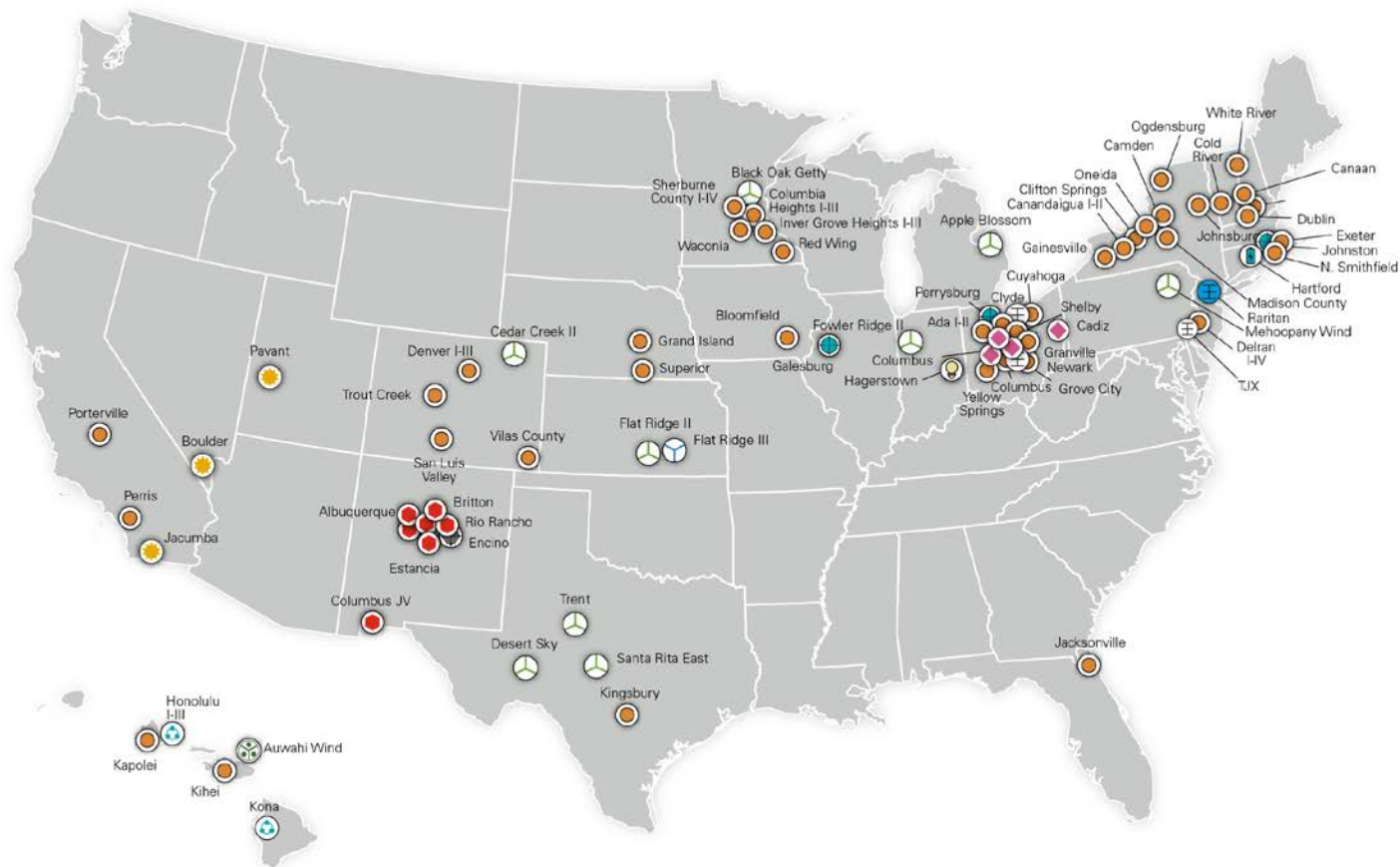


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Disclaimer And Our Views





AEP Renewables

- Wind (Active) - 9 Sites | 1,195 MW
- Wind (Planned) - 1 Site | 128 MW
- Solar (Active) - 3 Sites | 116 MW
- Wind/Storage (Active) - 1 Site | 17 MW

AEP OnSite Partners

- Solar (Active) - 45 Sites | 99 MW
- Solar (Planned) - 3 Sites | 10 MW
- Fuel Cell (Active) - 1 Site | 1 MW
- Engine (Planned) - 3 Sites | 17 MW

- Station (Active) - 4 Sites | 475 MVA
- Solar (Active) Joint Venture - 7 Sites | 55 MW
- Solar (Planned) Joint Venture - 1 Site | 33 MW
- Engine (Active) - 1 Site | 3 MW

- Energy Efficiency - 1 Site | NA
- Solar/Storage (Active) - 2 Sites | 1 MW

Our National Footprint

The Goals of this Package are Simple:

- Show future investors and customers the types of resources needed to meet future shifting demand and operational needs of the PJM system.
- Get the accreditation signal correct! Do not send artificially high accreditation signals that are only achieved by curtailing the rights of existing resources. Doing so inherently results in unnecessary overbuild.
- Treat intermittent, limited-duration, and hybrid resources in a manner identical to the current and future deliverability rights afforded to ALL other types of resources.
- Transparency of the model. Ensure stakeholder input/debate on input and assumptions that can change model output. Ensure the dispatch portion of the ELCC model incorporates appropriate operational realities.

If PJM shows the future need through a proper forward-looking accreditation signal, investors and customers will have the information to decide whether to take on investment and operating risks, just like what has been done up to this point in time.

Goals

Future Investment

The PJM proposal does NOT send accurate signals to investors and customers pertaining to future needs of capacity.

Current investors in renewables, limited-duration, and hybrid resources constructed their assets based on the need of customers and current load/demand curves.

The AEP Energy package would cause PJM to send forward signals to the investor community, providing clear expectations on the types of resources needed to meet future demand.

The AEP Energy Approach is Reasonable and Balanced



Future Investment (continued)

The PJM and IMM proposals are: invest in a resource and the model will tell you every year why it doesn't meet our new expectations. The proposals additionally includes the following. Even if you did everything perfectly, we need to reduce your investment (accreditation) value and capacity interconnection rights, even though "thou shall not discuss CIRs in this forum". Why your resource was built (for the current investment and demand signals), or whether it continues to provide exceptional service to meet continued needs, is of no concern.

Make FUTURE expectations clear. Customers can then decide with developers if they should invest in existing or new resource types.

The AEP Energy Approach is Reasonable and Balanced



Accreditation Signal

The PJM package will use an average modeling approach.
The IMM package will use a marginal approach.

The AEP Energy package will utilize a hybrid approach whose result will likely be somewhere within the range of the average and marginal results. Because our package recognizes the operational purpose for the resource at the time of construction, some results will likely come closer to a marginal accreditation for future interconnected resources. Academically, only the IMM and AEP Energy packages come close to sending the correct investment signals for future resources. Is the AEP Energy approach discriminatory-absolutely not! Everything is transparent. It forces nobody to invest in certain types of resources. Pick a technology that have significantly more accreditation and operational value to the system.

The AEP Energy package will have PJM publish the following information: Remaining quantity of capability accreditation available under differing load characteristics. As one resource type is reduced, it is logical that other types of resources will increase. (Example- if load shifts to evening, expect future solar to be accredited less and future wind to be accredited more.)

The AEP Energy Approach is Reasonable and Balanced



Treatment

The PJM and IMM packages will change the quantity that could be considered capacity. Your value will be forever changing and model-driven. The PJM and IMM approaches must ultimately cause changes to capacity interconnection rights capabilities, otherwise you can't 'make room' for all newcomers on the system. The end result is that you will only keep quantities of CIRs consistent with model output. Testing is the current method to maintain capacity injection rights by EVERY type of resource, not a model.

Even though capacity interconnection rights are not being discussed, the implications should be VERY clear. Renewables and energy storage will receive 'special,' detrimental treatment to allow the PJM and IMM packages to work.

PJM has already stated CIRs must be addressed immediately after a package is approved.

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Transparency

All Stakeholder should be concerned about a model that is not easily understandable and contains a variety of inputs, relationships, and assumptions that if changed, without stakeholder agreement and input, could affect your accreditation and ultimately your ability to maintain capacity interconnection rights (we aren't officially talking about this). Just an FYI-CIRs remain the upper ceiling on what can be offered into RPM, after taking into account everything else.

PJM does this for NO Other Resource Types. Discriminatory or special? You decide.

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Finally


Would you rather make investment decisions for an asset with a 20-35 year life based on 4-7 years of having any certainty, or would you prefer to decide knowing that the resource, as long as it performs well, should be able to maintain its inherent capacity accreditation value to the system? Just as all resources can do right now. No other types of resources in PJM will have an annual, or a 4-7 year period of known potential accreditation spit out by a planning model.

We are not guaranteeing an outcome with our proposal. We are not locking in a performance value or accreditation for resources if they cannot perform. The package asks for similar treatment already afforded to every resource type.

The AEP Energy Package represents a reasonable negotiation in the spirit of reaching consensus.

The AEP Energy Approach is Reasonable and Balanced





Thank you.
Any Questions?