

Facilitating Generation Connections - Changes to Performance Requirements

Presentation to Wind Power Standing Committee

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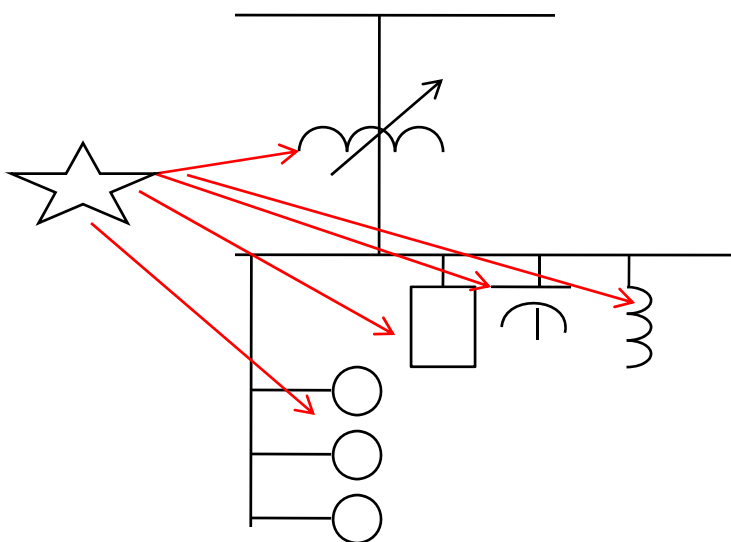


- To facilitate public policy objects
- To ease market entry by:
 - relaxing requirements where prudent
 - simplifying where possible
 - removing uncertainty throughout
- To update requirements to take advantage of lessons learned
- To increase IESO effectiveness in assessing proposed connections

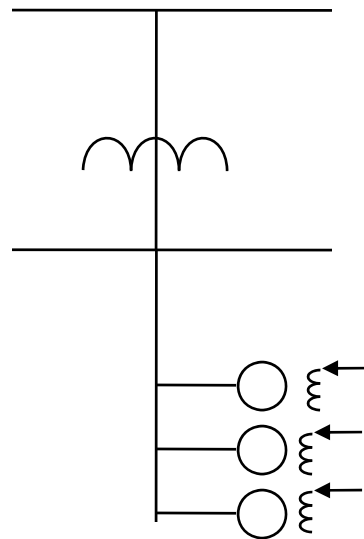
- Proposed changes will assist fostering the growth of renewable energy projects
 - No technical performance requirements are introduced for smaller distribution generation installations
 - Conflicts with Distributor requirements will be avoided with simplified requirements for larger distribution generation installations
 - Transmission solutions will be pursued when lost capability must be replaced

- Assist proponents through a reduction, better organization and simplification of requirements
- Provide greater certainty with measurable performance requirements
- Add flexibility to allow emerging technologies to be evaluated on a fair basis
- Increase effectiveness in the market entry process

- Proposed changes will promote more simple and effective designs

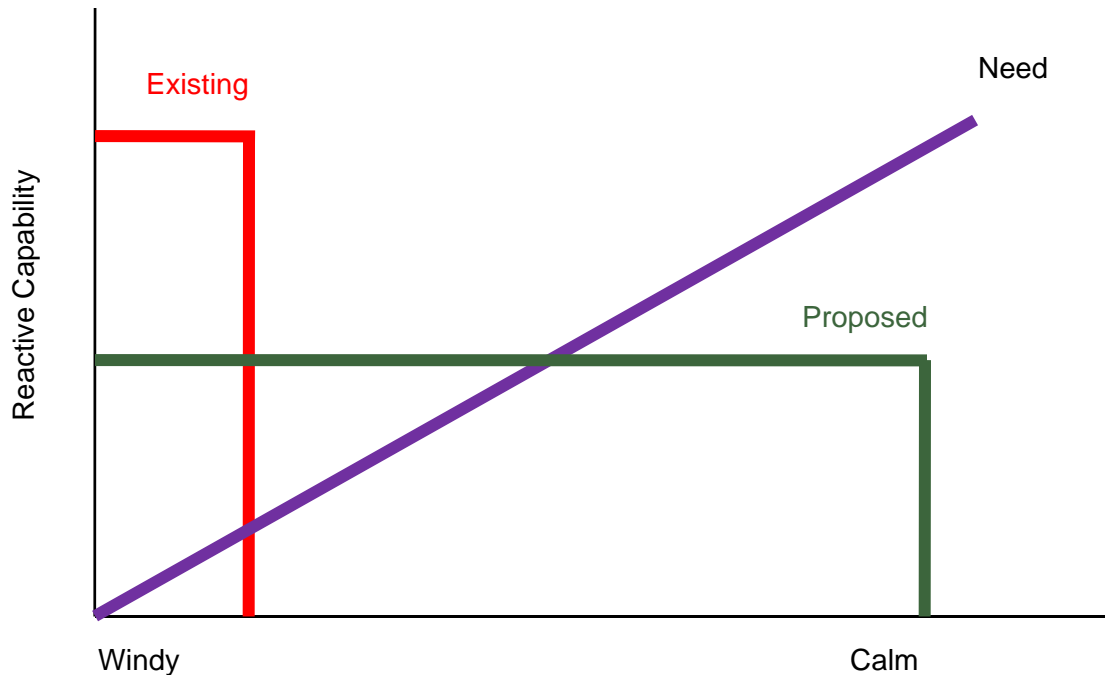


Complicated designs requiring close coordination of equipment from different vendors have arisen under the present requirements.



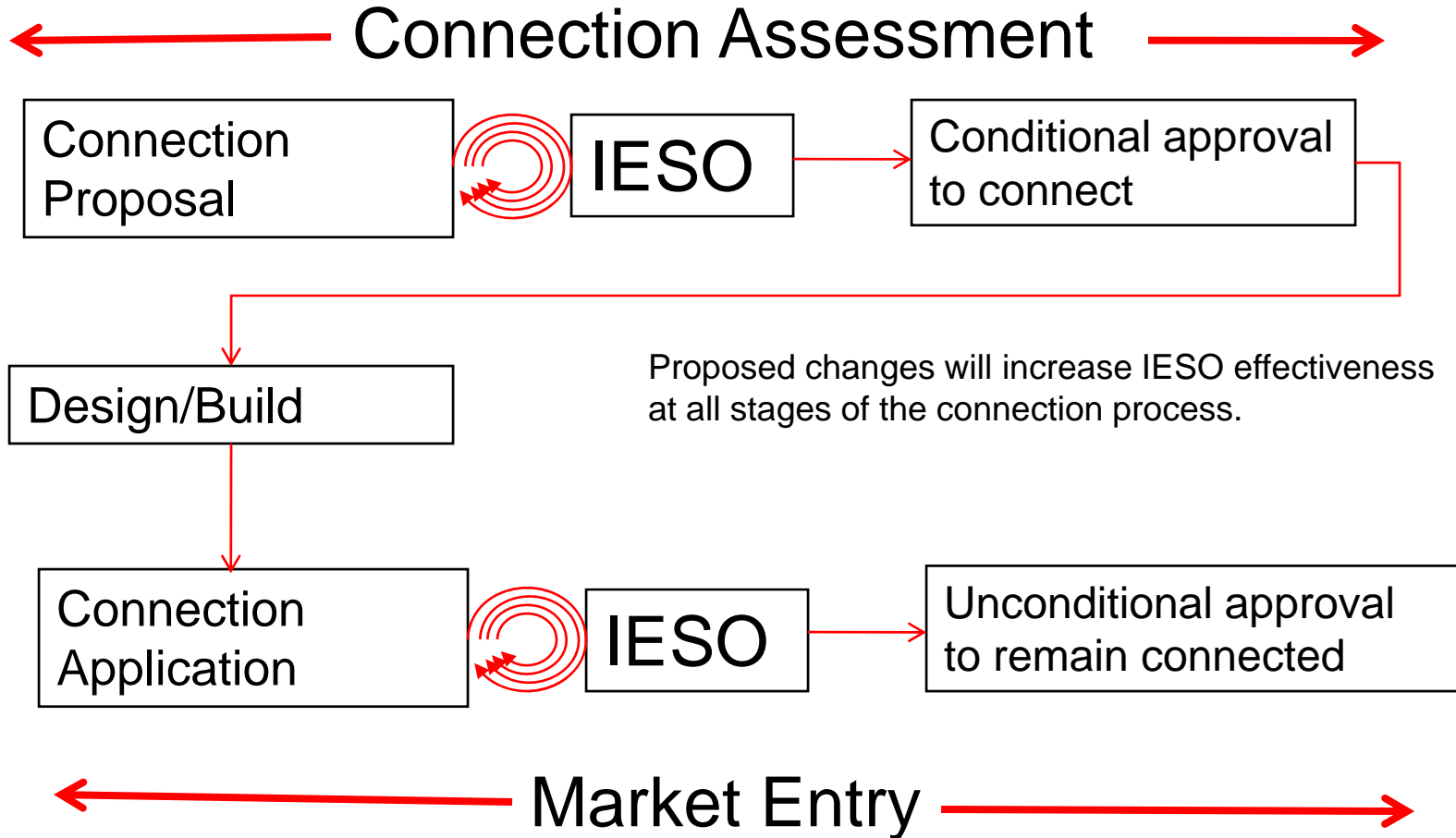
The rules ought to encourage designs that work better for all parties.

- For example: proposed changes to reactive capability for wind turbines



It is better to have a reduced capability that is available when needed than a greater capability that is only available when it is not needed.

- Functional unbundling presents new challenges to maintaining reliability. Older constructs are not well suited for the present.
- Some existing market rules are either ambiguous or difficult to interpret. There is not enough certainty whether equipment will “pass” or “fail” IESO scrutiny (e.g. tune stabilizers to provide as much damping as practicable).
- Discrepancies between “as-built” and “as-assessed” characteristics are often not discovered until after commissioning tests. This is too late.
- More guidance is needed to maintain reliability.



- Technical Panel (TP) approval to pursue Market Rule (MR) changes related to generator technical standards was granted in September.
- IESO has been consulting with participants and vendors to fine-tune these changes
- IESO will be seeking approval to enter the public consultation process associated with MR changes after the November 24 TP meeting.
- The earliest changes could be in effect is 22 days following IESO board approval.

- This proposal will make it easier for both distribution and transmission connected generation
- This rule change proposal seeks a balance between providing enough guidance to maintain reliability and providing enough flexibility to avoid unnecessary barriers to market entry