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# House Tax Proposal Unsettles the US Wind Industry

## The House bill proposes worrying changes to the Production Tax Credit that could severely curtail the four-year installation forecast for wind power.

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*A wind farm operating in Senator Chuck Grassley's home state of Iowa.*

Republicans in the U.S. House of Representatives presented their proposed tax reform bill last week -- the opening volley in legislative and executive efforts to pass a comprehensive tax reform package.

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While the reform package that ultimately passes into law will require Senate approval, the House bill proposes worrying changes to the Production Tax Credit (PTC) for wind power that immediately destabilizes tax equity, 80-20 repowering efforts (http://www.windpowerengineering.com/business-issues/80-20-repowering-united-states/) and 80 percent PTC value safe-harboring of turbines, and threatens to severely curtail the upcoming four-year installation forecast if the bill becomes law.

**Figure 1. House reform bill provisions affecting the PTC and associated effective dates**

| Provision | Effective date |
| --- | --- |
| "[The inflation provision of the PTC] shall not apply to any electricity…produced at a facility the construction of which begins after the date of the enactment of this subparagraph." | Applies to taxable years ending after the date of enactment |
| "Construction…shall not be treated as beginning before any date unless there is a continuous program of construction which begins before such date and ends on the date…placed into service." | Applies to taxable years beginning before, on, or after the date of enactment |

Note: Date of enactment refers to the date at which the bill is signed into law.
Source: US House Republican Caucus, MAKE

# Senate unlikely to agree on PTC measures

The odds for the passage of this draft bill and its wind provisions into law are long, as the Senate is highly unlikely to allow any reform bill to impose such Draconian reforms on the wind power market. Senator Chuck Grassley (R-Iowa), author of the PTC, holds a position on the key Senate Finance Committee, which amplifies his influence and provides an additional barrier to similar PTC-weakening measures finding their way into the Senate tax reform bill. But with such sweeping tax reform at stake, few if any other senators in the slight Republican majority will regard the PTC as anything more than a bargaining chip.

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If the Senate must reform the PTC, it would most likely result in the evolution of the credit's qualification mechanism from a "start of construction" based standard (either through physical work or safe harbor, as shown in Figure 2) to a "date of commercial operation" approach. If qualification standards are reduced to meeting a 2020 operation date, it would be a nominal boon to the industry. But, ultimately, leaving the qualification mechanisms alone and avoiding any policy uncertainty or industry recalibration is preferable.

**Figure 2. PTC qualification methods, requirements and deadlines under *existing* law**

| Qualification method | Requirements | Timeline |
|---|---|---|
| Safe harbour | Developers must incur at least 5% of total project costs through "equipment orders," which typically include whole turbines, towers only, rotors only, or nacelles without rotors but may include other components, component combinations or non-turbine equipment (e.g., transformers, substations, etc.). | If order placed by end of year*:<br>2016 – full PTC, must reach COD by 2020<br>2017 – 80% PTC, must reach COD by 2021<br>2018 – 60% PTC, must reach COD by 2022<br>2019 – 40% PTC, must reach COD by 2023 |
| Start of physical work | Developers must begin "physical work of a significant nature." As there is no stated threshold for "significant nature," the risks in this less empirical measure dissuade many developers able to meet safe harbour criteria from using start of physical work to qualify for the PTC. The IRS provided a list of examples of this qualification, including constructing turbine foundations and O&M access roads. | If construction began/begins in:<br>2014** – full PTC, must reach COD by 2018<br>2015** – full PTC, must reach COD by 2019<br>2016-2019 – see schedule for safe harbour |

Note: *Developer must take delivery of ordered components by April of the following year. **The final PTC-related guidance issued in January 2017 allows projects qualified with start of physical work to "reset" their qualification schedule if their developer qualifies later using safe harbour.
Source: MAKE, IRS

# Bill's introduction has immediate repercussions

Regardless of the House bill's viability, it has introduced a sudden jolt of uncertainty into the U.S. wind power market, with tangible results. The critical tax equity space, which had only recently started to function smoothly after disruption from the 2016 presidential election, will again seize up as investors recalibrate expectations and wait for further policy signals.

The threat to safe harbor and timelines have effectively frozen additional turbine procurement for the 80 percent PTC value, which has significant implications for the 80-20 repowering market, where several turbine OEMs and developers that were late to the repowering game had hoped to leverage the 80 percent PTC.

# If the bill is passed into law as-is

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If the bill is to pass in the near term as proposed, it would pack a mighty one-two punch. Projects previously qualified for the PTC in 2016 via safe harbor would be disqualified and forced to immediately requalify via the “physical work” provision of the PTC, leaving almost no time to secure financing and EPC contracts required for sustained construction. This would then leave the developer vulnerable to the inflation provision, which effectively reduces the PTC value from its current $24 per megawatt-hour to its original, decades-old $15 per megawatt-hour.

If the developer failed to requalify before the bill is signed into law, it would be able to, at best, secure a PTC at a fractional “phase-out” value of the $15 per megawatt-hour PTC.

**Figure 3. Potential qualification scenarios and PTC values assuming reform becomes law in Feb. 2018**

| Qualified via safe harbour in 2016 | Qualified via start of construction in 2016 | Continuous construction since 2016? | Action before passage of new law | PTC value (USD/MWh) |
|---|---|---|---|---|
| | | Yes | Business as usual, continued construction | 24 (full value) |
| | | No | Resumed construction in 2017, sustained since | 19.20 (80% of 24) |
| | | N/A | Began construction before YE/2017 | 19.20 (80% of 24) |
| | | N/A | None, construction begins after law passes | 9 (60% of 15) |

Source: MAKE

Figure 3 considers project outcomes in a scenario in which tax reform is enacted in February 2018. The scenario assumes the bill would not apply retroactively to projects that reach commercial operation before the law passes, though it assumes the second provision, regarding construction, does apply retroactively for projects that have not reached commercial operations before the law passes.

The bill does have positive provisions. Notably, it reduces the corporate tax rate to 20 percent and allows full asset depreciation in year one of operation, but these would not offset the inflation adjustment. Consequently, PPA pricing would need to adjust to lower incentive levels, as near-term technology and capital cost improvements are not sufficient to cushion the bill’s blow.

Disruptions would cascade; for example, utilities would require time-consuming revamps of resource plans and PPA pricing adjustments, in turn forcing independent power producers to revisit their pro formas with their entire supply chains.

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Under these circumstances, financiers and other counterparties will not be keen to commit to a project that could easily collapse if its developer fails to foster it into the construction phase in a dramatically narrow window. The same issue applies to repowering efforts, also likely to suffer due to the current political environment.

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