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Provided to

House Environmental Resources and Energy Committee

Public Hearing on HB 2104 and Bonding and Decommissioning of Solar and Wind Installations

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Introduction

Chairmen Metcalfe, Vitali and members of the House ERE Committee ("the Committee"): thank you for inviting Cypress Creek Renewables, LLC to present here today. My name is Zander Bischof, and I am the Senior Analyst on Cypress Creek's Policy and Strategy team. Cypress Creek supports the ERE's effort here to deliberate a decommissioning policy that would prudently standardize responsible decommissioning rules in the Commonwealth through legislation, though we also recommend that this be paired with new energy policy in the Commonwealth that's been discussed over the past year that cuts red tape and allows solar and storage to compete and bring cost reductions to all ratepayers.

Cypress Creek develops, owns and operates both community and utility scale solar and storage projects across many US states, including Pennsylvania. New development of solar facilities in the Commonwealth will create immense economic benefits in the form of consistent landowner payments, tax revenues and ratepayer savings, among other things, and Cypress Creek is proud to contribute to this. I commend Representative Rapp, her co-sponsors and the Committee for proactively working on policy to ensure that these growing industries are developed responsibly, getting ahead of any abandonment problems such as those that the Commonwealth has experienced with other industries. On behalf of Cypress Creek, I will be presenting today on the eight key components to an effective solar decommissioning policy.

Eight Components of Solar Decommissioning

1. Definition of Decommissioning

In laying out our view on the key components of a successful solar decommissioning policy, I want to start with the definition of "decommissioning". Decommissioning should be defined as the removal of non-utility owned facilities from the site and the responsible disposal of these facilities in accordance with local, state and federal laws, rules and regulations. Furthermore, it entails the restoration of the lands used for these facilities to a condition in which they can be used towards the same ends as they were prior to the installation of facilities, unless the landowner requests otherwise – for instance, that improvements including roads and structures be left on-site.

2. Solar Facilities Disposal Rules and Regulations

Cypress Creek Renewables, like many in the industry, are mindful of the concern members of the Committee may have regarding what happens to the materials in solar panels during a facility's life and at the end of a facility's life.

Let me first say that we share the Committee's concern for public health and safety of residents and landowners around these facilities. The solar panels used by Cypress Creek are safe – they have been rigorously tested via the U.S. EPA's Toxicity Characteristic Leaching Procedure (TCLP), the national hazardous waste standard test used to simulate outside and landfill environments. All the modules that we use have passed this test with no or safe levels of all compounds. This means they pose no danger to residents or wildlife during or after their operation. Let me reiterate, this means panels can safely be placed in landfills with no negative health or environmental impacts. However, panels also have certain valuable component parts that may lead these to be recycled instead of landfilled – either way, residents of the Commonwealth are protected.

3. Standardized Requirement for Decommissioning

The creation of a statewide standard for decommissioning is prudent. Although the likelihood of solar facility abandonment is very low, the small possibility that this happens can be effectively mitigated at modest cost through a well-designed decommissioning policy. By addressing this issue through legislation, this relieves the administrative burden of creating fairly technical decommissioning policy at the local level and avoids a patchwork of divergent ordinances across localities in the state. The establishment of a size threshold, such as the 3 MWac line drawn by House Bill ("HB") 2104, is reasonable and avoids placing undue burden on smaller facilities.

The development of a standard decommissioning form is prudent and will help to ensure effective compliance with and enforcement of this policy. We support HB 2104's creation of an inclusive and transparent process at the Department of Environmental Protection ("DEP") to develop this form and look forward to contributing to this effort.

4. Amount of Financial Assurance

Another critical component to an effective decommissioning policy is the requirement that financial assurance be posted to cover the net costs of decommissioning. This is a means of ensuring that sufficient capital is available at the end of a facility's useful lifetime to cover the costs of decommissioning in the unlikely event that a facility is abandoned.

I would encourage the Committee to look at best practices adopted in calculating net costs in other states that have addressed these issues, such as Texas, West Virginia, Montana and Oklahoma. These states incorporate an element commonly referred to as "salvage value", which helps to produce an accurate assessment of the value of the materials within a solar facility and ensures that the landowner fully realizes the benefits of the installation. I would welcome the opportunity to continue our dialogue on this critical topic.

5. Calculation of Financial Assurance

The calculation of the component parts of the financial assurance derivation—cost of decommissioning and Salvage Value—submitted with the decommissioning plan should be required from a qualified party – a professional engineer in the Commonwealth. Furthermore, this calculation should be made periodically to ensure that it remains up-to-date.

HB 2104 establishes reasonable requirements and procedures, requiring that qualified professional engineers will be the parties performing the needed studies, and that their analyses be updated every five years. In tandem, these would ensure that the cost of decommissioning remains accurate over time.

6. Deadline for Posting Financial Assurance

Solar facilities have cost structures and business models that differ substantially from that of oil and gas production. In particular, these facilities typically require a large amount of upfront capital expenditure, and cost very little to operate once built. For this reason, these facilities tend to sign long-term "anchor" contracts with creditworthy off-takers for the first fifteen to twenty years of the facilities' lifetimes—often necessary to secure affordable financing—that guarantee rates to these facilities for the energy generated. This creates a situation of predictably high operating margins for the facilities' during this window of time, making the risk of facility abandonment negligible during this period. Even if the owner of the facility went bankrupt during this period, the lenders would have claim to the facility and a very strong incentive to continue to operate the facility or sell it to another company that would do so. Therefore, there is no additional benefit in requiring that financial assurance be posted during this period – it would present substantial costs to facility owners without mitigating any abandonment risk.

I am encouraged to see the profiled calculation of financial assurance over the first twenty years of these projects in HB 2104, only reaching the full amount of financial assurance in year twenty. However, I urge the Committee to consider delaying the initial posting of financial assurance to later in facilities' operating lives when anchor contracts begin to expire, such as was recently done through SB 760 in Texas, which only begins to require financial assurance twenty years after the Commercial Operations Date.

7. Forms of Financial Assurance

Allowing flexibility in the forms of financial assurance that can be posted is important to mitigate related financial "carrying costs". To this end, financial assurance should include bonds, escrow accounts, and letters of credit, which are all reliable tools for ensuring capital is available at the end of a facility's useful life.

I urge the Committee to consider expanding the permissible forms of financial assurance to include a letter of credit, as this increased flexibility will reduce the costs to facility owners of posting financial assurance while still providing the same level of certainty to local governments that decommissioning costs will be covered.

8. No Retroactive Application of Decommissioning Requirements

HB 2104 correctly only applies requirements on new projects that signed leases after the date of passage. As recognized by the bill drafters, retroactive application can unfairly impose costs on projects that can risk project attrition and the loss of accompanying benefits. Furthermore, businesses thrive where there is certainty, and retroactive imposition of cost on businesses can lead to much higher perceived risk of doing business in the state.

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Conclusion

HB 2104 is timely and forward-looking legislation that would get ahead on an important issue for responsible energy infrastructure development in the Commonwealth. This legislation is comprehensive, hitting on all of the eight components mentioned above. I thank Representative Rapp and the co-sponsors for introducing it, and the Committee for creating this forum to discuss this important issue. I hope that the Committee will consider my feedback on areas where the legislation can avoid red tape

and thereby be made less costly to comply with in ways that do not detract whatsoever from the degree to which this legislation addresses the issues at hand.

Thank you for your time and consideration. I would be happy to answer any questions.

Sincerely,

Zander Bischof

Senior Analyst, Policy & Strategy

Cypress Creek Renewables