MEMORANDUM

Date: December 4, 2020

To: The Ohio Manufacturers' Association

From: John Seryak, PE and Ryan Schuessler (RunnerStone, LLC)

RE: H.B. 798 Analysis – Impact to Customers and Markets

House Bill 798 (H.B. 798) was introduced in the House Select Committee on Energy Policy and Oversight on December 2, 2020. H.B. 798 is an attempted course correction of House Bill 6 (H.B. 6), the passage of which is now the root of a federal racketeering case. However, the scandal surrounding H.B. 6 illuminates a years-long problem with Ohio's electricity regulation and policy. That is, monopoly electric utilities have effectively seized control over the policies and regulations *meant to check their own monopoly power*.

When state government grants a monopoly franchise to a corporation, it in turn takes away customers' power of choice. In exchange, and absent the natural checks-and-balances of competition, the monopoly is supposed to submit itself to laws and regulations devised by the state. It is all too logical that customers should be the driving force of these laws and regulations, for it is customers whose power of choice was eliminated when the monopoly franchise was granted. Customer-driven policy, through trusted government, is what creates fairness and balance with monopolies.

H.B. 798 makes some thoughtful revisions but maintains H.B. 6's monopoly influence over important laws. It also does not restore customer choice or markets where it could. As a result, customers remain on the hook for billions in above market charges through 2030. This perpetuates a power imbalance that is inherently unfair. The needed corrections are intuitive:

- Allow customer choice and competition to exist where it already does,
- Encourage and foster customer choice and competition to emerge where it can, and
- Where there is no choice, create balance and fairness through customer-driven policy and regulation.

Below, we address the costs and power imbalances for the headline provisions of H.B. 798: the nuclear plant subsidies and renewable subsidies, the OVEC coal-plant subsidies, and decoupling. Even with some improvements to H.B. 6, the total annual cost of these H.B. 798 provisions to customers is shown in Table 1.

	Ohio Power Cost ($/year)	Columbus Southern Cost ($/year)	DP&L Cost ($/year)	Duke Cost ($/year)	Ohio Edison Cost ($/year)	Toledo Edison Cost ($/year)	CEI Cost ($/year)
Small	$ 4,604	$ 5,587	$ 2,684	$ 6,526	$ 4,338	$ 4,108	$ 4,382
Medium	$ 34,532	$ 41,900	$ 20,130	$ 48,945	$ 32,161	$ 30,790	$ 32,465
Large	$ 43,952	$ 43,952	$ 26,829	$ 44,272	$ 39,894	$ 39,894	$ 39,894
Extra Large	$ 43,952	$ 43,952	$ 26,829	$ 44,272	$ 39,894	$ 39,894	$ 39,894
Lodging	$ 3,262	$ 3,958	$ 1,901	$ 4,623	$ 3,008	$ 2,945	$ 3,035
School	$ 2,246	$ 2,725	$ 1,309	$ 3,183	$ 2,132	$ 2,050	$ 2,155
Restaurant	$ 951	$ 1,154	$ 554	$ 1,348	$ 881	$ 860	$ 889
Small Retail	$ 720	$ 873	$ 420	$ 1,020	$ 680	$ 656	$ 687
Church	$ 208	$ 253	$ 121	$ 295	$ 204	$ 192	$ 206
Residential	$ 39	$ 39	$ 24	$ 42	$ 30	$ 31	$ 31

Table 1. Annual Cost of H.B. 798 to Customers

Nuclear Plant Subsidies

H.B. 6 created up to $150 million per year in subsidies for two nuclear plants in Ohio, Davis-Besse and Perry, both currently owned by Energy Harbor. The funds are collected through charges on customers' electric bills over a seven-year term, totaling up to $1.05 billion in costs to consumers for the nuclear plant subsidies. H.B. 798 makes two modifications to H.B. 6's design. First, it delays the subsidy term by a year, now to begin in 2022 and end in 2028, but it does not shorten the term or reduce the amounts collected from customers. Second, it attempts to strengthen language regarding financial auditing of the nuclear power plants.

While these changes appear to be well intentioned, they do not fully restore a power balance for customers. First, competition exists in competitive wholesale electric markets already, and competition is an effective check-and-balance for customers. Second, all evidence has thus far demonstrated that the nuclear plants are financially viable without subsidies. This evidence includes Energy Harbor's own financial statements to its investors, and to the Nuclear Regulatory Commission (NRC), both of which assert that the nuclear plants are financially viable without H.B.6 subsidies. In Energy Harbor's "2020-2022 Financial Outlook", they show $515 million in profit this year, $585 million next year, and $645 million in 2022[1]. There has been no evidence presented to the contrary.

Thirdly, an effective financial audit may be better than no audit, but it cannot identify all business decisions that create financial losses, nor necessarily correct them. This is demonstrated by recent third-party expert audits of the OVEC power plants contracted by the PUCO. As described in our Nov. 12th memo[2], these audits have repeatedly identified OVEC's decision to operate the plant at a

[1] https://www.ohiomfg.com/wp-content/uploads/Energy-Harbor-Investor-Deck-5.10.2020-Final-Investor-update.pdf
[2] Seryak, J. and Worley, P., "Ohio's Costly – and Worsening – OVEC Situation", Memorandum to The Ohio Manufacturers' Association, Nov. 12th, 2020.

financial loss during certain times. Yet, OVEC has not changed its operating practices, and Ohio customers continue to be charged for the continued operations and losses. Consider that a power plant business makes hundreds of decisions each day. When customers are covering the financial losses, the incentive for the power plant's management to make careful and economic decisions is removed. A retroactive financial audit that guarantees money-losing decisions will be made whole, will likely yield more money-losing decisions.

Lastly, because H.B. 798 leaves in place the eligibility to receive state subsidies for these nuclear plants, they will remain subject to the Minimum Offer Price Rule (MOPR) of PJM's capacity market established by the Federal Energy Regulatory Commission. To be subject to the MOPR, a power plant has only *to be eligible* to receive state subsidies. PJM has announced its restart of capacity auctions for the upcoming May 2021. Under H.B. 798, the nuclear plants will be subject to the MOPR. As such, the nuclear plants will then face a set of choices:

- The nuclear plants can decline, by choice, to participate in the PJM capacity auction and forego the substantive revenue. In turn, they could show this lack of capacity revenue as "need" to the state in the financial audit process. Essentially, Energy Harbor would be in position to choose whether to show need for a subsidy or compete for revenue.
- The nuclear plants can apply for a Unit Specific Exemption of the MOPR. If the plants receive a Unit Specific Exemption, they will be allowed to participate in the capacity auction and receive capacity revenue if the plants clear the auction. This would be allowed if the plants did not need the subsidy to clear the auction competitively.
- The nuclear plants can participate in the capacity auction with the minimum offer price as determined by PJM. They may or may not clear the auction with this minimum offer price.

The challenge of a financial audit, even a well-defined audit, is that when considering MOPR, the audit will have difficulty distinguishing the nuclear plants' needs from the prudency of Energy Harbor's business decisions. However, H.B. 798's financial audit is not well defined, lacking direction on what is to be reviewed, an intervention process at the OAQDA, and a time frame for OAQDA's actions. Importantly, the proposed audit is retrospective, allowing collection of funds prior to need being established.

The annual cost impact of the Clean Air Fund to typical customer types is shown in Table 2. We include the additional $20 million per year of the Clean Air Fund that is allocated to select solar projects.

Category	Example Typical Energy Use (kWh/year)	AEP Ohio Cost ($/year)	DP&L Cost ($/year)	Duke Cost ($/year)	First Energy Cost ($/year)
Manufacturer - Small	1,000,000	$ 2,596	$ 883	$ 2,628	$ 2,190
Manufacturer - Medium	7,500,000	$ 19,470	$ 6,623	$ 19,710	$ 16,425
Manufacturer - Large	100,000,000	$ 25,950	$ 8,826	$ 26,269	$ 21,891
Manufacturer - Extra Large	1,000,000,000	$ 25,950	$ 8,826	$ 26,269	$ 21,891
Lodging	708,400	$ 1,839	$ 626	$ 1,862	$ 1,551
School	487,790	$ 1,266	$ 431	$ 1,282	$ 1,068
Restaurant	206,544	$ 536	$ 182	$ 543	$ 452
Small Retail	156,332	$ 406	$ 138	$ 411	$ 342
Church	45,245	$ 117	$ 40	$ 119	$ 99
Residential	10,013	$ 10	$ 10	$ 10	$ 10

Table 2. Clean Air Fund Costs to Customers

OVEC Coal Plant Subsidies

H.B. 6 also created subsidies for the Ohio Valley Electric Corporation's two 1950s-era coal plants. One of the coal plants is in Indiana and would benefit from this subsidy. As shown in our Nov. 12th memo, the OVEC subsidies have done little to change OVEC's poor performance. The OVEC power plant is still selling power for less than it costs to generate it, has declining power output, declining employment, and enough carbon dioxide emissions for two nuclear power plants' worth of offsets. H.B. 798 does not solve OVEC's problems, nor does it incent OVEC's owners to make fiscally sound business decisions. Instead, H.B. 798 leaves in place the OVEC subsidies. Requiring utilities to use good faith efforts to divest the assets is meaningless as the PUCO has required this for years to no avail. Without a change in course, Ohioans could be on the hook for $1.5 billion in additional costs to OVEC over its remaining life.

The annual cost impact of the OVEC subsidies to typical customer types is shown in Table 3.

Category	Example Typical Energy Use (kWh/year)	2021 Rider LGR ($/year)
Manufacturer - Small	1,000,000	$ 1,801
Manufacturer - Medium	7,500,000	$ 13,508
Manufacturer - Large	100,000,000	$ 18,003
Manufacturer - Extra Large	1,000,000,000	$ 18,003
Lodging	708,400	$ 1,276
School	487,790	$ 879
Restaurant	206,544	$ 372
Small Retail	156,332	$ 282
Church	45,245	$ 81
Residential	10,013	$ 14

Table 3. OVEC Subsidy Cost to Customers

Decoupling

H.B. 6 also created a decoupling mechanism that is estimated to benefit FirstEnergy to the tune of about $355 million through 2024 but could be extended in perpetuity[3]. If continued absent a rate case and change in law, FirstEnergy could collect about $750 million through 2030. These estimates may even be conservative. In 2021, FirstEnergy's decoupling rider, Rider CSR, will increase by $85 million, collecting $102 million from customers in just that one year.

H.B. 798 terminates this decoupling mechanism 60 days after the bill's effective date. If H.B. 798 were signed in mid-December of 2020 with an emergency clause, FirstEnergy's decoupling mechanism would be terminated in mid-February of 2021. This late termination would allow FirstEnergy to collect about $13 million in 2021 for decoupling.

H.B. 798 also does nothing to end decoupling provisions that other utilities are receiving. While these decoupling provisions were not created by H.B. 6, they were created in PUCO proceedings at the electric utilities request *because of* state mandated energy-efficiency requirements. H.B. 6 ended the state mandated efficiency requirements and purported to end all the associated costs. Currently, Duke and AEP Ohio have decoupling riders that remain in place, justified originally by energy efficiency programs that will soon no longer exist.

The cost of decoupling for each territory for 2021, based on H.B. 798, is shown below in Table 4. Statewide decoupling will cost Ohio's residential and small commercial and industrial sector over $41 million in 2021.

[3] Seryak, J. and Worley, P., "H.B. 6 Decoupling Provision - $355 Million for FirstEnergy through 2024, Possibly Millions More", Memorandum to The Ohio Manufacturers' Association, August 20th, 2020.

AEP Ohio Power ($/year)	AEP Columbus Southern ($/year)	DP&L ($/year)	Duke ($/year)	FE Ohio Edison ($/year)	FE Toledo Edison Cost ($/year)	FE CEI Cost ($/year)	Total Decoupling ($)
$ 11,186,560	$ 9,948,590	$0	$6,281,206	$ 6,504,470	$ 2,261,689	$ 5,410,550	$41,593,065

Table 4. Total and Per Territory 2021 Decoupling Cost

The cost of decoupling for typical customer types is shown in Table 5 and Table 6.

Category	Load Factor (%)	Example Typical Energy Use (kWh/year)	Example Typical Demand (kW)	AEP Ohio Power Cost ($/year)	AEP Columbus Southern Cost ($/year)	DP&L Cost ($/year)	Duke Cost ($/year)
Small	40%	1,000,000	285	$ 207	$ 1,190	$ -	$ 2,097
Medium	50%	7,500,000	1,712	$ 1,554	$ 8,923	$ -	$ 15,728
Large	60%	100,000,000	19,026	$ -	$ -	$ -	$ -
Extra Large	80%	1,000,000,000	142,694	$ -	$ -	$ -	$ -
Lodging	60%	708,400	135	$ 147	$ 843	$ -	$ 1,486
School	35%	487,790	159	$ 101	$ 580	$ -	$ 1,023
Restaurant	50%	206,544	47	$ 43	$ 246	$ -	$ 433
Small Retail	35%	156,332	51	$ 32	$ 186	$ -	$ 328
Church	20%	45,245	26	$ 9	$ 54	$ -	$ 95
Residential		10,013		$ 15	$ 15	$ -	$ 17

Table 5. 2021 Decoupling Cost to Customers in AEP, Duke, and DP&L

Category	Load Factor (%)	Example Typical Energy Use (kWh/year)	Example Typical Demand (kW)	FE Ohio Edison Cost ($/year)	FE Toledo Edison Cost ($/year)	FE Cleveland Electric Illuminating Cost ($/year)
Small	40%	1,000,000	285	$ 347	$ 117	$ 391
Medium	50%	7,500,000	1,712	$ 2,228	$ 857	$ 2,533
Large	60%	100,000,000	19,026	$ -	$ -	$ -
Extra Large	80%	1,000,000,000	142,694	$ -	$ -	$ -
Lodging	60%	708,400	135	$ 181	$ 118	$ 207
School	35%	487,790	159	$ 185	$ 103	$ 208
Restaurant	50%	206,544	47	$ 57	$ 36	$ 65
Small Retail	35%	156,332	51	$ 56	$ 32	$ 63
Church	20%	45,245	26	$ 23	$ 12	$ 26
Residential		10,013		$ 5	$ 6	$ 7

[4]

Table 6. 2021 Decoupling Cost to Customers in First Energy Territories, as Modified by H.B. 798

[4] First Energy territory costs are pro-rated assuming that the decoupling provision will be active for approximately 1.5 months prior to H.B. 798 taking effect.