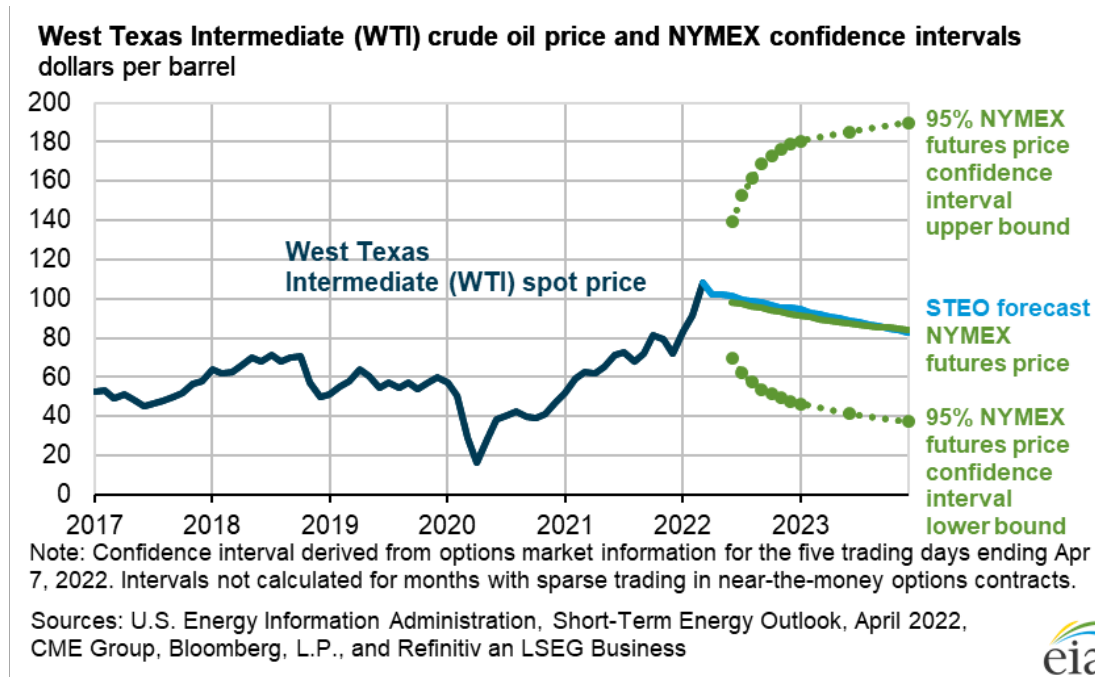


**Office of Utility Consumer Counselor  
Comments on Indiana Michigan Power Company’s  
2021 Integrated Resource Plan**

Commodity Indices

Refer to Section 5.2.1 Economic Assumptions. I&M indicates it used Moody’s Analytics economic forecast issued in January 2021. I&M does not indicate if it updated any of the assumptions throughout 2021 to account for rising prices and inflation seen towards the end of 2021 into the beginning of 2022. Although, it was unknown how drastically the prices would increase at the time the IRP inputs were decided, by mid-2021 there were indicators that inputs should be adjusted to match the current economic climate. Without updates, I&M’s forecast is potentially misguided and, therefore, may be unreliable. If I&M did update its IRP inputs based on economic indicators, it should provide a narrative indicating inputs were updated and how it was accomplished.

Economic indicators identify commodity prices are experiencing significant inflation. West Texas Intermediate crude oil has fluctuated in price by approximately \$50 per barrel since mid-2021 to approximately \$110 per barrel in April 2022. Furthermore, Commodity indices for non-ferrous metals wire and cable, steel, transformers, and regulators have increased by 30% since mid-2021. The commodity prices are reflected in the graphs below:



Data extracted on: April 27, 2022 (10:40:15 AM)

### PPI Commodity Data

#### 12-Month Percent Change

**Series Id:** WPU1026

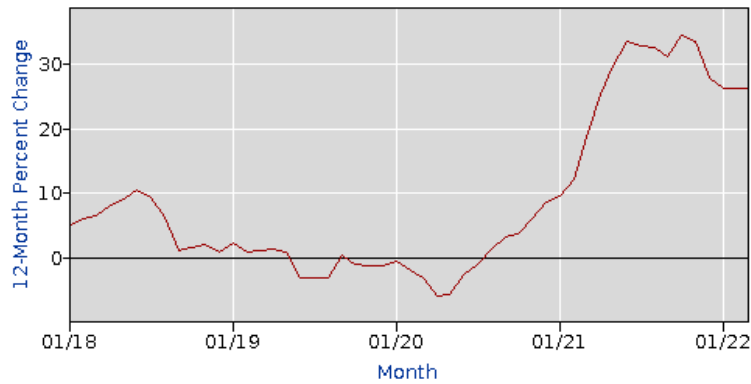
Not Seasonally Adjusted

**Series Title:** PPI Commodity data for Metals and metal products-Nonferrous wire and cable, not seasonally adjusted

**Group:** Metals and metal products

**Item:** Nonferrous wire and cable

**Base Date:** 198200



Retrieved: <https://data.bls.gov/pdq/SurveyOutputServlet>, 4/27/2022, search series ID WPU1026

## Databases, Tables & Calculators by Subject

Change Output Options:

From: 2018 To: 2022 GO

include graphs  include annual averages

[More Formatting Options](#) →

Data extracted on: April 27, 2022 (10:41:50 AM)

### PPI Commodity Data

#### 12-Month Percent Change

**Series Id:** WPU10

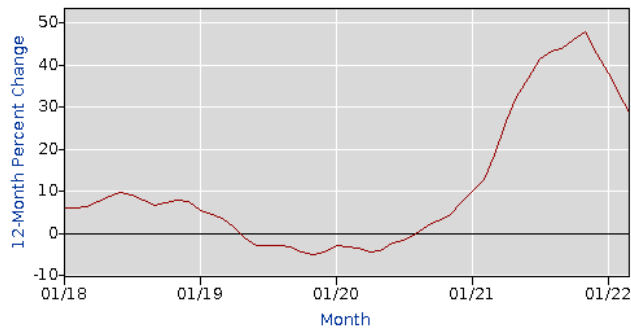
Not Seasonally Adjusted

**Series Title:** PPI Commodity data for Metals and metal products, not seasonally adjusted

**Group:** Metals and metal products

**Item:** Metals and metal products

**Base Date:** 198200



Retrieved: <https://data.bls.gov/pdq/SurveyOutputServlet>, 4/27/2022, search series ID WPU10

## Databases, Tables & Calculators by Subject

Change Output Options: From: 2018 To: 2022 GO  
 include graphs  include annual averages [More Formatting Options](#) →

Data extracted on: April 27, 2022 (10:45:33 AM)

### PPI Commodity Data

#### 12-Month Percent Change

Series Id: WPU117409

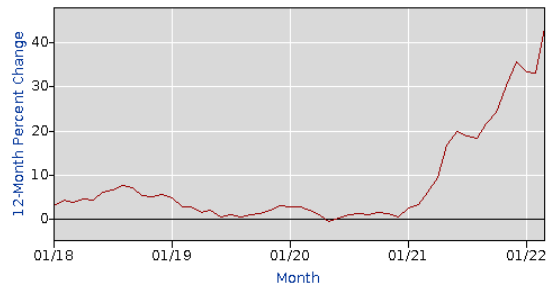
Not Seasonally Adjusted

Series Title: PPI Commodity data for Machinery and equipment-Power and distribution transformers, except parts, not seasonally adjusted

Group: Machinery and equipment

Item: Power and distribution transformers, except parts

Base Date: 199912



Retrieved: <https://data.bls.gov/pdq/SurveyOutputServlet>, 4/27/2022, search series ID WPU117409

Current WTI oil and commodity prices coupled with inflation could indicate changed preferred portfolio outcomes in I&M's IRP.

### U.S. Department of Commerce Investigation Regarding Solar Cells & Panels

The U.S. Department of Commerce announced it is investigating whether imported solar panels assembled in Cambodia, Malaysia, Thailand, and Vietnam are avoiding duties designed to limit solar cells and panels imported from China (in violation of anti-dumping rules). This announcement has already had impacts on current and future solar developments. Although the DOC indicated there would be no additional duties imposed at this time, it will consider tariffs on the solar industry based on the results of its investigation. In addition to potential cost increases, the investigation probe brings uncertainty and delays to solar panel installations – the McGuireWoods Group states it “has seen the uncertainty surrounding this investigation have novel impacts on supply acquisition, offtake and other contracts.”<sup>1</sup> Although the repercussions of this trade probe are currently unknown, the impact on current and planned solar projects could be significant. Northern Indiana Public Service Company has already announced, because of the DOC investigation “...it will delay retirement of its largest coal-fired power plant by two years.” NIPSCO further stated “...delays will affect solar and solar storage projects this year and next.”<sup>2</sup>

<sup>1</sup> <https://www.mcguirewoods.com/client-resources/Alerts/2022/4/us-department-commerce-investigation-solar-panel-puts-solar-projects-risk?p=1>

<sup>2</sup> <https://www.enews.net/articles/solar-market-turmoil-delays-ind-coal-shutdown/>

## Environmental

I&M assumed Rockport Unit 1 will retire in 2028, and Unit 2 is currently modeled to provide capacity for I&M until 2024. Under the 2020 Steam Electric Reconsideration Rule, I&M's current commitment to retire Rockport Units 1 and 2 by 2028 will allow it to comply with the updated Steam-Electric Generation Effluent Limitation Guidelines (ELGs). However, in July 2021, the Environmental Protection Agency (EPA) announced it will initiate a rulemaking to revise the ELG standards set forth under the 2020 Steam Electric Reconsideration Rule. In this announcement, the EPA indicated it would determine if more stringent limitations are appropriate for each of the listed sub-categories, including units that commit to cease combusting coal by 2028.<sup>3</sup> If the current Administration accelerates the 2028 date, this could negatively impact Unit 2 as well. It is uncertain if the new rulemaking will allow facilities without bottom ash transport treatment systems in place to continue operation until 2028. Neither Unit 1 nor 2 have closed-loop, bottom ash transport treatment systems. Therefore, Rockport Units 1 and 2 may be required to install additional equipment or retire earlier than I&M anticipates in its IRP.

Regarding coal combustion residuals (CCR) disposal, I&M must comply with the CCR Rule's requirements. The CCR Rule has undergone multiple revisions since its initial promulgation in 2015. The Part A CCR Compliance rule, which was finalized in August 2020, is currently the most relevant revision for Rockport's continued operation. The Part A CCR Compliance rule revised the deadline when unlined surface impoundments and units that failed the aquifer location restriction must cease receiving waste and initiate closure or retrofit to April 11, 2021. The rule also revised alternative closure provisions to allow facilities additional time to develop alternative capacity to manage their CCR waste streams. A facility could apply for compliance extension to continue sending CCR material to unlined surface impoundments until no later than October 15, 2023, provided the facility evaluated each waste stream and developed the fastest technically-achievable alternative capacity option by the October 2023 date. The EPA will consider each facility's extension request on a case-by-case basis. I&M applied for an extension request for Rockport's West Bottom Ash Pond (WBAP) on November 30, 2020, and the EPA deemed its application complete on January 11, 2022.<sup>4</sup> In its extension filing, Rockport indicated the fastest technically-achievable option to cease sending CCR material to the WBAP would be May 11, 2023.<sup>5</sup> The EPA also sought additional information from I&M for Rockport's extension request on March 12, 2022, and I&M provided this additional information on March 18, 2022.<sup>6</sup>

When the EPA issued determinations on the completeness of extension applications on January 11, 2022, it denied three non-I&M facilities' extension requests. In these denials, the EPA indicated these facilities did not appropriately consider the fastest date to cease each individual

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<sup>3</sup> EPA (July 26, 2021) Pre-publication notice for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category. [https://www.epa.gov/system/files/documents/2021-07/prepublication-notice-of-rulemaking-initiative\\_07\\_26\\_2021.pdf](https://www.epa.gov/system/files/documents/2021-07/prepublication-notice-of-rulemaking-initiative_07_26_2021.pdf).

<sup>4</sup> EPA. Coal Combustion Residuals Part A Implementation website: <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-implementation>.

<sup>5</sup> <https://www.aep.com/Assets/docs/requiredpostings/ccr/2020/12-2-2020/RK-BAP-SIAlternateCapacityInfeasibleNotice-11302020.pdf>.

<sup>6</sup> <https://www.aep.com/Assets/docs/requiredpostings/ccr/2021/3-25-2021/RK-BAP-SIAlternateCapacityInfeasibleDemoSupInfo-03242021.pdf>.

wastewater stream to the surface impoundment separately, and it mandated these facilities stop sending CCR material to their surface impoundments within 135 days.<sup>7</sup> To date, The EPA has not approved I&M's extension request. If rejected, and the agency found I&M has not considered each possible option for each individual waste stream and selected the fastest technically-achievable technology, it would not be unreasonable to assume similar 135-day mandates would be applied. In turn, this could result in a temporary shutdown of Rockport Units 1 and 2 or accelerate their retirement.

The EPA has also issued a proposed "Good Neighbor" Plan that creates a Federal Implementation Plan (FIP) for 25 states, including Indiana, to achieve each state's Clean Air Act (CAA) "good neighbor" obligations for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The Good Neighbor Plan would cut Nitric Oxide (NOx) emissions for fossil fuel-fired power plants beginning in 2023 and would reduce allowed emissions further in 2026.<sup>8</sup> While this rule could increase Rockport's operational costs, it is unlikely to drive an earlier retirement date because Rockport Units 1 and 2 have Selective Catalytic Reduction (SCR) units installed for NOx control.

Based on the regulatory developments noted above, the OUCC is concerned Rockport Units 1 and 2 could be forced to retire earlier than the Preferred Portfolio's assumed 2028 Rockport Unit 1 retirement date and Unit 2's assumption to provide capacity until 2024. I&M also evaluated portfolios assuming 2024, 2025, and 2026 early retirement dates for Rockport Unit 1. While these portfolios do not fully address the potential immediate early retirement of both Rockport units, it provides some insight into how I&M may respond to an earlier Rockport retirement date.

I&M also accounted for potential carbon regulations by incorporating a carbon dioxide (CO<sub>2</sub>) price in its model. In its Reference Scenario and the Rapid Technology Advancement Scenario, I&M assumes a CO<sub>2</sub> price beginning in 2028 and increasing through the planning period. In the Enhanced Regulation Scenario, CO<sub>2</sub> prices are significantly higher than the Reference Scenario and are implemented earlier in 2024. I&M's assumed CO<sub>2</sub> prices appear reasonable, based on recent carbon prices in the Regional Greenhouse Gas Initiative (RGGI) and California Carbon markets. However, the OUCC notes potential CO<sub>2</sub> regulation is more likely than not to be implemented through command-and-control technology requirements as opposed to market-based regulatory instruments. While carbon prices provide insight on the ongoing O&M costs of operating fossil-fueled generation resources, they may not accurately capture capital investments that could drive earlier retirement of existing coal and gas resources or increase the cost of building new gas resources.

Finally, while the OUCC appreciates I&M's detailed description and updates to various environmental regulations potentially impacting its generation, I&M does not provide a description of the technological requirements and costs assumed for each generating unit to comply with each regulation. The OUCC recommends I&M provide more detailed compliance costs in future IRP filings, specifically within the body of Volume 1 of its IRP. The OUCC

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<sup>7</sup> <https://www.epa.gov/coalash/coal-ash-rule>.

<sup>8</sup> <https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs>.

understands this information could be confidential; however, I&M can take measures to protect this information by redacting it in public filings and providing it only to individuals who have signed a non-disclosure agreement with the company.

### Demand-Side Management (DSM)

I&M hardwired in the resulting energy and demand savings from the Conservation Voltage Reduction (CVR) Program and Demand Response (DR) Programs into its 2021 IRP. In I&M's 2023-2025 DSM Plan, Cause No. 45701. I&M states "for DR, the I&M MPS [Market Potential Study] determined the level of cost effective DR that was used as a "going-in" resource in the IRP."<sup>9</sup> It also states "In addition to EE and DR inputs for the I&M MPS, the Company provided Siemens with an analysis that determined the level of cost effective CVR that was used as a "going-in" resource in the IRP."<sup>10</sup>

The OUCC is concerned that I&M did not allow these programs to complete on a level playing field with supply-side resources. This would seem to be at odds with some basic IRP principles, as well as comments in previous IURC Director's reports about not "hard-wiring" DSM into IRPs.

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<sup>9</sup> I&M Cause No. 45701, Petitioner's Witness Jon C. Walter, page 9, lines 1-2.

<sup>10</sup> I&M Cause No. 45701, Petitioner's Witness Jon C. Walter, page 9, lines 3-5.