

**INDIANA COAL COUNCIL'S COMMENTS ON
NIPSCO 2016 INTEGRATED RESOURCE PLAN**

The Indiana Coal Council (ICC) conducted a review of the Integrated Resource Plan (IRP) that Northern Indiana Public Service Company (NIPSCO) prepared and submitted to the Indiana Utility Regulatory Commission (IURC) on October 31, 2018.

Contemporaneous with this IRP process, NIPSCO is litigating a general rates case in Cause No. 45159. The ICC intervened in that case, and is represented in the rate case by separate counsel. These comments are not intended to be, and should not be considered, an ex parte communication with the Commission regarding the merits of the rate case. Reference within these comments to the rate case or to evidence prefiled in the rate case is for informational purposes related to the IRP only. To the extent that the ICC wishes to use these comments to advocate its position in the rate case, ICC reserves its option to offer these comments as evidence in the rate case or to request that the Commission take administrative notice of these comments in the rate case.

A. INTRODUCTION AND SUMMARY OF CONCLUSIONS.

The IURC website states:

Jurisdictional electric utilities are required to submit Integrated Resource Plans (IRPs) **every three years** according to Indiana Code § 8-1-8.5-3(e)(2). The IRPs are subject to a rigorous stakeholder process. **IRPs describe how the utility plans to deliver safe, reliable, and efficient electricity at just and reasonable rates.** Further, these plans must be in the public interest and consistent with state energy and environmental policies. Each utility's IRP explains how it will use existing and future resources to meet customer demand. **When selecting these resources, the utility must consider a broad range of potential future conditions and variables and select a combination that would provide reliable service in an efficient and cost-effective manner.**¹

As discussed further below, the ICC's comments on NIPSCO's IRP reach the following conclusions.

- 1. The NIPSCO IRP is obsolete and not relevant for decision-making purposes, and because NIPSCO filed this IRP one year in advance of the three-year statutory requirement, there is no statutory requirement for this submission until late 2019.**

On October 31, 2018, the same day that it filed this IRP, NIPSCO filed a base rates case (Cause 45159), which relies on the IRP and requests among other relief the approval of a new tariff for the Large Industrial customers in NIPSCO's service territory. The load forecast, which is an underlying foundation for the IRP, will radically change if the IURC approves the new large industrial rate structure proposed in the Rate Case. As a result, the load forecast in the IRP is no longer relevant and should not be the basis of any subsequent decisions. The IRP should be withdrawn, corrected, and resubmitted.

- 2. NIPSCO failed to consider rate impacts despite the IURC's requirement that IRPs describe how the utility plans to deliver safe, reliable, and efficient electricity at just and reasonable rates.**

NIPSCO describes in Section 11 (Compliance with Proposed Rule) that "[a] discussion of how the utility's resource planning objectives, such as cost effectiveness, rate impacts, risks and uncertainty, were balanced in selecting its preferred resource plan" (p. 201). The corresponding

¹ Available at <https://www.in.gov/iurc/2630.htm> (last visited 02/28/19) (emphasis added).

index table points to Section 9 and 9.2.3.² As it turns out, there is no discussion of rate impacts in either section. Rather NIPSCO uses a 30-year net present value (NPV) of revenue requirements as a proxy for rate impacts. While a NPV of revenue requirements may be a consideration in evaluating alternative portfolios, it is absolutely not a determination of rate impacts over the review period, or most importantly the next five to 10 years. As discussed in NIPSCO's Rate Case, the accelerated retirements of the coal plants combined with the requested change in the Large Industrial tariff would increase Residential Customer bills by 32 percent without mitigation.³ NIPSCO makes no mention in the IRP of the rate shock that could occur as a result of the Preferred Plan. NIPSCO should prepare an annual rate analysis for residential customers under all scenarios as part of the IRP.

3. NIPSCO's IRP is biased against continued operations of the remaining coal plants calling into question its conclusions.

The bias is reflected in the construction of the scenarios, the assumptions, the all-source RFP evaluation, the modelling, and the analysis of results. Further, NIPSCO failed to consider the impact of potential changes to its Large Industrial tariffs despite the fact that such changes were being contemplated at the same time the IRP was being developed. NIPSCO failed "to consider a broad range of potential future conditions and variables and select a combination that would provide reliable service in an efficient and cost-effective manner" by demonstrably biasing its analysis in favor of a particular outcome. NIPSCO should revise its IRP to eliminate these biases.

4. NIPSemCO was indifferent to considering a path that would have mitigated rate shock on customers by determining what could be done to maintain existing coal capacity as long as possible.

NIPSCO made no attempt to consider creative alternatives for maintaining its coal fleet to allow an extended period during which the plants could be depreciated while in use. NIPSCO ignored a specific offer to purchase two of its coal units. NIPSCO failed to engage an investment banker to sell the coal plants in an orderly process. NIPSCO should be required to demonstrate a good faith effort to minimize customer impacts as measured by residential customer rates, including a reconsideration of coal plant closure dates and the sale of its coal fleet

² The second reference is actually ".2.3". ICC assumes this is simply a typographical omission as section 9.2.3 would appear to be the appropriate reference. To the extent that the reference is to Section 2.3, the argument still holds.

³ Gaske Direct Testimony, Cause No. 45159, pp. 42-43, and Attachment 18-G.

B. COMMENTS AND ANALYSIS.

- 1. THE IRP SUBMITTED ON OCTOBER 31, 2019 IS OBSOLETE AND NOT RELEVANT FOR DECISION-MAKING PURPOSES. AS NIPSCO FILED THIS IRP ONE YEAR IN ADVANCE OF THE THREE-YEAR STATUTORY REQUIREMENT, THERE IS NO STATUTORY REQUIREMENT FOR THIS SUBMISSION UNTIL LATE 2019.**

RECOMMENDATION #1

THE IRP SHOULD BE WITHDRAWN, CORRECTED, AND RESUBMITTED.

- 1.1 On October 31, 2018, NIPSCO filed a base rates case in Cause 45159 which among other things requests a material revision to its Large Industrial tariff. The revision will allow NIPSCO's largest industrial customers to opt into retail wheeling and reduce or eliminate paying for generation assets built to serve their firm and interruptible loads.
- 1.2 The IRP does not consider the impact of the proposed change to the Large Industrial tariff. The only explicit mention of the tariff is the following paragraph on page 73 of the IRP.

On October 31, 2018, NIPSCO filed an electric rate case that revises its industrial service structure by replacing Rider 775 and Rates 732, 733, and 734 with Rates 830 and 831. The new industrial service structure requires NIPSCO's largest industrial customers on Rate 831 to designate their firm service with the remainder of their service requirements being registered as a MISO LMR which is by definition curtailable. NIPSCO expects an increase in registered LMRs as a result of this new industrial service structure unless those Rate 831 customers utilize other options within the rate to acquire capacity from the MISO annual Planning Resource Auction or through a bilateral agreement between NIPSCO and a third party entered on their behalf. In addition, the large industrial customers will continue to be eligible to participate in MISO's Demand Response Resource program discussed below.

- 1.3 In a section on Emerging Issues, NIPSCO notes that the loss of one or more of its largest industrial customers "for whatever reason" would result in a significant loss of revenue. NIPSCO concedes that such a loss of load would adversely affect residential, commercial, and smaller industrial customers.⁴
- 1.4 NIPSCO acknowledges in the IRP that:

[The] five largest industrial customers (ArcelorMittal, US Steel, NLMK, BP and Praxair) account for approximately 40% of NIPSCO's energy demand and approximately 1,200 MW of peak load plus reserves when viewed on a non-coincident, individual customer basis. Most of these customers are tied to global steel industry cycles. This concentration of customers tied to a single industry poses significant customer risk. Loss of one or more of these customers, for whatever reason, would result in a significant decline in billing revenues.⁵

While suggesting the risk to NIPSCO customers was the cyclic nature of the global steel industry, NIPSCO failed to mention that the real risk to other customers was the Large Industrial tariff

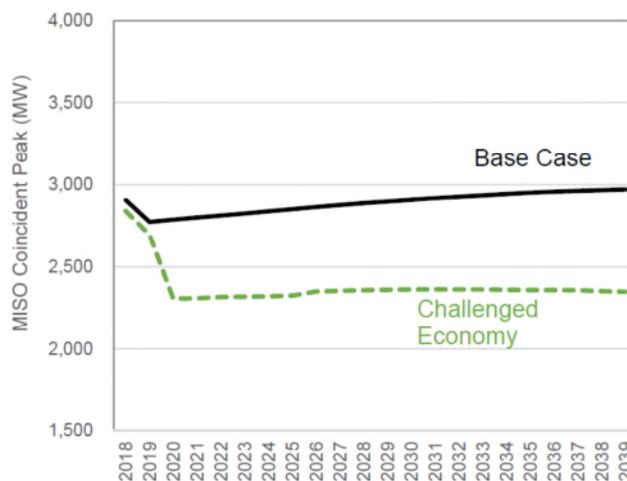
⁴ NIPSCO 2018 IRP page 4.

⁵ *Id.*

NIPSCO was simultaneously negotiating, which would remove a substantial portion load and revenues related to the large industrial customers.

- 1.5 On February 20, 2019, the IURC approved a settlement between the Petitioners, NIPSCO and the OUCC in Cause No. 45071. The order confirms the change in WCE’s status and allows the power to be sold via a private transmission line or through NIPSCO.
- 1.6 NIPSCO indicated in the Rate Case filing that it expects all five of its largest industrial customers (14 premises) to take service under Rate 831.⁶
- 1.7 Despite knowing at the time it submitted I s IRP that industrial load could be an issue based on the proposed new rate structure for large industrial customers, NIPSCO chose not to reconsider lower load forecasts in its base IRP assumptions.
- 1.8 NIPSCO argued that in its Challenged Economy scenario, a lower load forecast was considered. As shown below, there was a lower load forecast in the Challenged Economy scenario.

Figure 8-31: NIPSCO Peak Load Growth Forecast in Challenged Economy Scenario



- 1.9 If the lower load forecast was the result of the change in the Large Industrial Tariff, it would have been so noted in the description of the scenario. According to NIPSCO, the lower industrial load was due to the Challenged Economy. There is a difference between low load as a result of a challenged economy and a deliberate tariff change that results in loss of industrial load and considerably higher costs for non-Large Industrial classes. In fact, if the challenged economy forecast had considered the reduced Industrial load due to the tariff, it would likely show an even further reduction.
- 1.10 Given the economic benefit of being excused from participation in NIPSCO’s fixed costs, it is reasonable to assume development of self-generation could occur during the initial term causing a further drop in load in 2024, or thereabouts.

⁶ Direct Testimony of Paul S. Kelly, Page 13, Lines 8-9.

- 1.11 There is also the matter of the forecast of the remaining load. As pointed out by NIPSCO, both residential and commercial demand are affected by the price of electricity.⁷ If NIPSCO loses revenues from large industrial customers utilizing the new tariff to acquire off-system energy supply, this will likely result in higher electricity prices for NIPSCO's remaining customers. This increase in electricity price would likely result in reduced residential and commercial demand, and thus in a lower overall electricity demand forecast. There is no indication in the IRP that the Challenged Economy incorporated price-related effects of the Large Industrial tariff.
- 1.12 It is problematic that when NIPSCO decided to proceed with the Rate Case, it did not pause on the submission of the IRP and reconsider the analysis in the context of the considerably diminished load forecast (and higher non-large industrial rates) that is expected to occur with the proposed tariff changes, even if only as an additional scenario. Absent such an analysis, the IRP does not consider the broad range of future conditions as required.

⁷ NIPSCO 2018 IRP, pp. 19-20.

2. NIPSCO FAILED TO CONSIDER CUSTOMER RATE IMPACTS DESPITE THE IURC'S REQUIREMENT THAT THE IRPS DESCRIBE HOW THE UTILITY PLANS TO DELIVER SAFE, RELIABLE, AND EFFICIENT ELECTRICITY AT JUST AND REASONABLE RATES. AN NPV COMPARISON IS NOT A PROXY FOR A RATE ANALYSIS.

RECOMMENDATION #3

NIPSCO SHOULD PREPARE AN ANNUAL RATE ANALYSIS FOR RESIDENTIAL CUSTOMERS UNDER ALL SCENARIOS AS PART OF THE IRP.

- 2.1 NIPSCO failed to consider rate impacts despite the IURC's requirement that the IRPs describe how the utility plans to deliver safe, reliable, and efficient electricity at just and reasonable rates.
- 2.2 NIPSCO describes in Section 11 of the IRP that a discussion of how its resource planning objectives, such as cost effectiveness, *rate impacts*, risks and uncertainty were balanced in selecting its preferred resources and that discussion is provided in Sections 9.3 and 9.2.3.⁸ There is no discussion of rate impacts in either section. Rather, NIPSCO notes in Section 9.2.3 that it measures rate impact through a comparison of NPV's. NIPSCO, in essence, uses the NPV as a proxy for rate impact, whereby a lower NPV equates to a lower rate impact and a higher NPV equates to a higher rate impact.
- 2.3 This disregards the fact that an NPV analysis assumes a levelized cost of capital, whereas ratemaking factors in the depreciation of capital and the rate impact tends to be higher in the near-term and to reduce gradually over time. In reality, a 30-year NPV, which is the metric NIPSCO used in this IRP,⁹ says nothing about a portfolio's rate impact over the next five to 10 years and therefore it is not a proxy for evaluating the rate impact.
- 2.4 In its rate case, NIPSCO estimates the accelerated retirements of the coal plants combined with the requested change in the Large Industrial tariff could increase residential customer bills by 32 percent without mitigation.¹⁰
- 2.5 There is no mention in the IRP of the rate shock that could occur as a result of the Preferred Plan.
- 2.6 In recognition that a 32 percent increase in residential bills would constitute rate shock, NIPSCO put forth a mitigation plan in the rate case. The mitigation plan summarized below seeks an 11.2 percent across-the-board increase for all customer classes except Large Industrials. In other words, for residential customers to only face an 11.2 percent increase in rates, most other customer classes would face a significantly larger rate than the cost of service study would assign to them.

⁸ See fn 3 above.

⁹ The 2016 IRP considered 20-year NPV's as the basis for comparison. The NPV was increased in the 2018 IRP without explanation. As discussed in Section 4 below, the increased term served to reduce the NPV of the Preferred Portfolio.

¹⁰ Gaske Direct, Cause No. 45159, p. 42 and Attachment 18-G.

Revised Proposed Mitigation of Rate Increases

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Current Rate Structure		New Rate Structure	Proposed Revenue	Deficiency	Increase Revised	Deficiency Increase	Swing (H)-(F)
System Total	1,524,443,776	(90,014,326)	1,434,429,450	1,545,815,189	(111,385,739)			
Residential Rate 811	476,660,471		476,660,471	630,351,294	(153,690,823)	32.24%	(53,465,277)	11.2%
C&GS Heat Pump Rate 820	856,616		856,616	984,309	(127,693)	-14.91%	(96,084)	11.2%
GS Small Rate 821	230,447,805		230,447,805	222,562,025	7,885,780	-3.42%	(25,848,507)	11.2%
Commi SH Rate 822	1,135,600		1,135,600	1,041,522	94,078	-8.28%	(127,376)	11.2%
GS Medium Rate 823	170,557,998		170,557,998	157,559,143	12,998,855	-7.62%	(19,130,877)	11.2%
GS Large Rate 824	205,990,902		205,990,902	187,642,508	18,348,394	-8.91%	(23,105,257)	11.2%
Metal Melting Rate 825	6,819,228		6,819,228	6,640,412	178,816	-2.62%	(764,888)	11.2%
Off-Peak Serv Rate 826	91,903,053		91,903,053	110,325,521	(18,422,468)	20.05%	(10,308,434)	11.2%
Ind. Pwr Serv. - Large Rate 831	271,041,300	(90,014,326)	181,026,974	151,823,073	29,203,901	-16.13%	29,203,901	-16.1%
Ind. Pwr Serv. - Small Rate 830	48,089,637		48,089,637	52,665,407	(4,575,770)	9.52%	(5,394,041)	11.2%
Muni. Power Rate 841	3,282,401		3,282,401	3,452,206	(169,805)	5.17%	(368,176)	11.2%
INT WW Pumping Rate 842	104,190		104,190	31,674	72,516	-69.60%	(11,687)	11.2%
Railroad Rate 844	2,205,195		2,205,195	2,101,992	103,203	-4.68%	(247,349)	11.2%
Street Lighting Rate 850	7,405,512		7,405,512	9,752,550	(2,347,038)	31.69%	(830,649)	11.2%
Traffic Lighting Rate 855	853,806		853,806	707,231	146,575	-17.17%	(95,768)	11.2%
Dusk-to-Dawn Rate 860	2,452,136		2,452,136	3,165,504	(713,368)	29.09%	(275,049)	11.2%
Interdepartmental	4,637,924		4,637,924	5,008,816	(370,892)	8.00%	(520,219)	11.2%
	1,524,443,774		1,434,429,448	1,545,815,187	(111,385,739)	7.77%	(111,385,737)	

Source: Revised Exhibit 18-6 from Petitioner's Submission of Second Set of Corrections

Customer classes which have higher rates because of mitigation

- 2.6 It is worth noting that NIPSCO is not sure that the 11.2 percent increase is adequate to recover costs with the change in the Large Industrial tariff and includes in its proposal the possibility of a true up later in 2019 if it underestimated the increase needed.
- 2.7 The IURC expects utilities to provide an analysis of rate impacts in their IRPs. NIPSCO did not do so.
- 2.8 The premature retirement and associated accelerated recovery will likely increase customer rates substantially in the first 10 years of the plan with and without the proposed changes in the Large Industrial tariff. A comparison of annual rate impacts under all scenarios would provide necessary information to the IURC in analyzing the reasonableness of the IRP's recommendations.

3. NIPSCO’S IRP IS BIASED AGAINST CONTINUED OPERATION OF THE REMAINING COAL PLANTS CALLING INTO QUESTION ITS CONCLUSIONS.

RECOMMENDATION #4

NIPSCO SHOULD REVISE ITS IRP TO ELIMINATE THESE BIASES.

- 3.1 Many aspects of the NIPSCO IRP are biased against continued operation of the remaining coal fleet. The most significant are (1) the construction of the scenarios, (2) the assumptions regarding coal and carbon prices, (3) the evaluation of the all-source RFP results, and (4) the modelling.
- 3.2 NIPSCO developed four scenarios for its IRP. These scenarios are laid out by NIPSCO as follows:

Scenario Theme	NIPSCO Load	CO ₂ Price	Natural Gas Price	Coal Price	Power Price	Capital Costs	Other Enviro. Costs
Base	Base	Base	Base	Base	Base	Base	Base
Aggressive Environmental Regulation	Base	High	High	Low	High	Low <small>renew. / sto.</small>	High
Challenged Economy	Low	Low	Low	High	Low	Base	Base
Booming Economy & Abundant Natural Gas	High	Base	Low	Low	Low	Base	Base

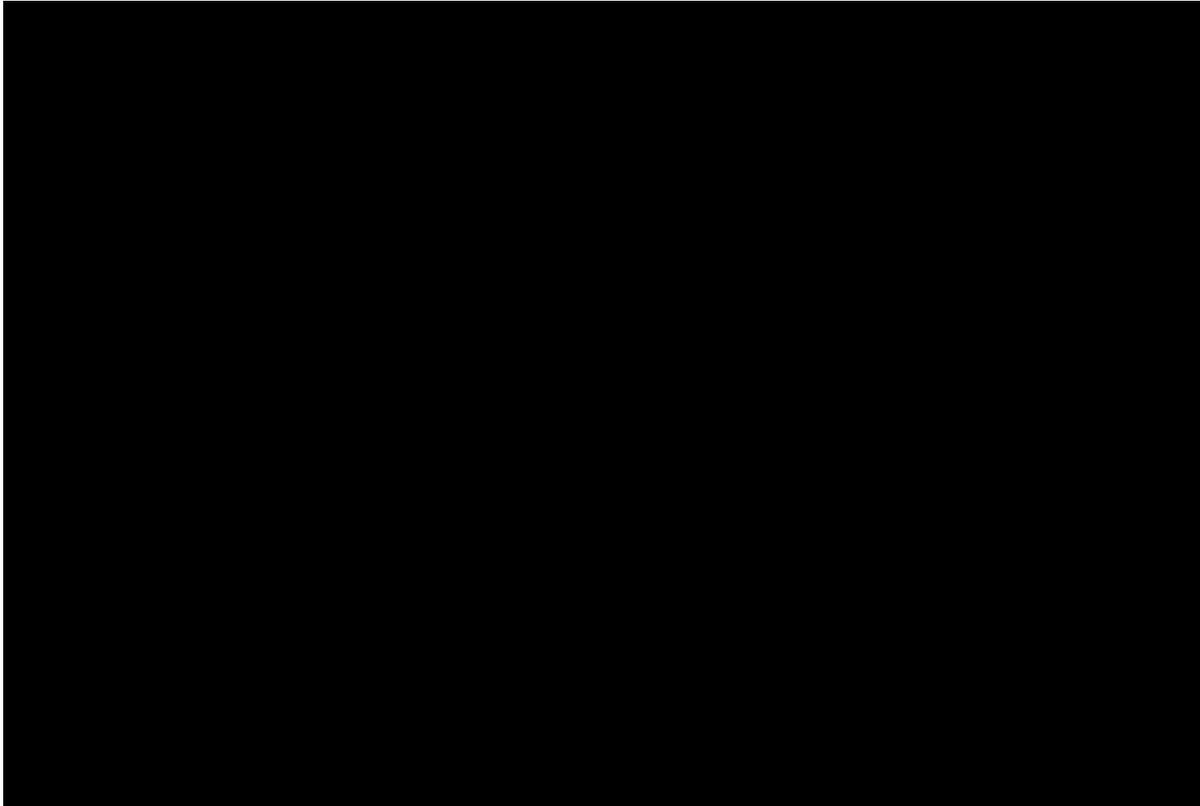
These scenarios do not properly evaluate the likely ranges of outcomes that NIPSCO should have considered before making any decisions because of the combinations of critical assumptions. For example, the Challenged Economy Scenario assumes slow economic growth with zero carbon pricing. NIPSCO was specifically asked why this was done when the two are unrelated. NIPSCO agreed the comment was fair (which can only be interpreted that NIPSCO agreed the two are unrelated) and that it was done essentially because there would be too many possible scenarios if all variations were considered. NIPSCO acknowledged that the Challenged Economy is “not the only way a no carbon scenario could play out, but it was a plausible outcome that helps bracket the range of future states-of-the-world.”¹¹

- 3.3 Assuming zero carbon in only the Challenged Economy scenario did not bracket the range of future outcomes. By not considering a zero-carbon price scenario in the Base scenario, NIPSCO—whether deliberately or not—has weighted the scale against coal, which is analytically problematic given that currently there is no carbon market and the Affordable Clean Energy Rule (ACE), which is scheduled to replace the Clean Power Plan (CPP), does not create a carbon market.
- 3.4 The fuel price combinations for the different scenarios are also weighted against coal. The Challenged Economy scenario assumes a high coal price for reasons that were not properly explained, at the same time showing low natural gas prices. This particular combination is reminiscent of the no carbon scenario utilized by NIPSCO in its 2016 IRP, where it discounted natural gas prices when the carbon price was zero but did not discount the coal price, thereby

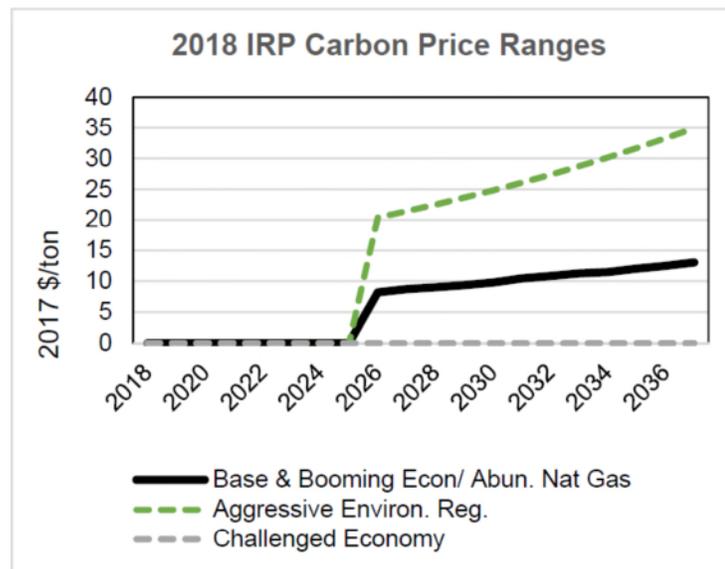
¹¹ IRP, Appendix A, Page 484.

preserving the advantage that natural gas realizes under a carbon tax. NIPSCO considers a low coal/high natural gas price scenario only in the Aggressive Environmental scenario which has high carbon prices and tight environmental requirements. NIPSCO ignores the scenarios that are the most likely to happen, i.e., high natural gas prices and low coals.

- 3.4 NIPSCO's assumptions regarding delivered coal prices in the IRP are problematic. It had been clear throughout 2018 that both coal producers and railroads were aggressively pursuing business in order to assist with the viability of coal plants moving forward. As a result, there was a disconnect between the coal prices NIPSCO was assuming in the IRP and the current state of the market.
- 3.5 NIPSCO confirmed this in its response to ICC Data Request 1-029, which asked for the delivered coal prices assumed for 2019 in the IRP versus currently expected coal prices. The results summarized below show differences ranging from \$1.42 to \$3.68 per ton which would have affected dispatch and scenario valuation. These differences are significant given the potential demand from the Schahfer and Michigan City units. Fuel prices could be \$15 million per year or more lower than what NIPSCO assumed in its analysis.



- 3.5 NIPSCO assumed the three carbon price scenarios shown in IRP Figure 7-1 provided below.

Figure 7-1: 2018 IRP Carbon Price Ranges

The base carbon pricing scenario assumes a new federal rule or legislative action effective in 2026. The base carbon scenario is used in both the Base and Booming Economy scenarios. A higher priced scenario is assumed in the Aggressive Environmental Regulation scenario. The third scenario, called the Challenged Economy scenario, assumes no carbon pricing.

- 3.6 There are many issues related to the carbon prices assumed by NIPSCO. The ACE rule has been proposed as a replacement to the CPP. The ACE rule proposes to restore the inside-the-fence interpretation of Best System of Emission Reduction (BSER), which makes states responsible for determining appropriate efficiency improvement by source, and eliminates exposure to New Source Review for efficiency improvements. As proposed, ACE allows states to consider the age of a plant in determining what, if any, efficiency improvements should be made. Trading between plants is not allowed although trading between units at individual plants is.
- 3.7 ACE does not establish a trading protocol, which means it would not establish a price for carbon. Yet NIPSCO does not consider a zero-carbon price in any scenario but the Challenged Economy scenario.
- 3.8 The primary assumption in the Base scenario should have been zero cost. This is consistent with how the Energy Information Administration models carbon. This is consistent with how the recently-released Consumers Energy IRP considered carbon. Non-zero carbon forecasts would appropriately be considered as a sensitivity that, as NIPSCO would say, could bracket the results.
- 3.9 Even in the sensitivities that assumed a carbon cost, a 2026 start year is unlikely and not justified. A review of the CPP shows it was nine years from the start of development (2013) to initial compliance (2022). Full compliance was not scheduled to be completed until 2030. Given the nine year gap from development to initial implementation of the CPP, assuming the next Congress restarted the clock and a rule was developed in 2021, a 2030 implementation would seem to be the earliest. Given the political realities, a later date would seem more likely.

- 3.10 The CPP was challenged. The full D.C. Circuit heard oral argument *en banc* in September 2016, but did not issue a decision and held the case in abeyance.¹² In February 2016, during the pendency of that appeal, the United States Supreme Court stayed implementation of the CPP.¹³ In October 2017, EPA proposed to repeal the CPP after completing a thorough review consistent with the Energy Independence Executive Order issued by President Trump in March 2017.¹⁴ In August 2018, EPA proposed the ACE Rule as a replacement for the CPP.¹⁵
- 3.11 Accordingly, the current regulatory environment concerning carbon pricing while uncertain has gained some clarity. The Energy Information Administration (EIA) does not assume a cost of carbon in its base forecast. Consumers Energy in its June 2018 IRP assumed no carbon regulation in its Business-As-Usual (BAU) case or Emerging Technologies scenario.¹⁶ NIPSCO provided an inadequate rationale for assuming carbon pricing.
- 3.12 Michael Nasi on behalf of Peabody Coal found three problems with NIPSCO’s regulatory assumptions regarding Coal Combustion Residuals (CCR) and Effluent Limitation Guidelines (ELG). The problems included assumed regulatory timelines that were too short given currently available extension options and EPA-announced plans to significantly reform these rules; compliance cost assumptions that were too high; and the inclusion of costs that will be incurred regardless of retirement decision.¹⁷
- 3.13 Mr. Nasi also found that NIPSCO’s assumptions regarding almost \$0.5 billion in compliance costs for regulations that have “not yet been proposed” unjustifiable. According to Mr. Nasi, NIPSCO has provided no numerical proof or additional studies for selecting the much more expensive option to include in its IRP. He further notes there is also no basis in the record to explain, let alone justify, NIPSCO’s assumptions that additional NO_x reductions will be required.
- 3.14 Mr. Nasi also pointed out that NIPSCO has ignored the potential reduction in compliance costs associated with the recent finding by EPA that the Mercury and Air Toxics Standard (MATS) was not “appropriate and necessary.” Mr. Nasi concluded that it is not reasonable for NIPSCO to continue to assume long-term MATS O&M Costs (or savings from their early retirement) for any of these plants given the very real possibility that EPA will withdraw MATS in whole or in part.
- 3.15 Collectively, NIPSCO assumes a need for well over \$1 billion in costs for compliance on a speculative basis. Further, within a relatively short time frame, NIPSCO will have greater clarity on actual requirements and costs.
- 3.16 It is worth noting that NIPSCO confirms the uncertainty associated with these costs. Kelly Carmichael states in his rate case testimony that cost recovery is not being sought for ELG compliance because the costs and timing are uncertain.¹⁸
- 3.17 Despite concerns raised by ICC and others during the IRP stakeholder process, NIPSCO utilized an all source Request for Proposal (RFP) as part of its IRP. NIPSCO indicated the purpose of the RFP was to “fine tune” resource costs. NIPSCO used the same consulting firm for both the IRP

¹² *West Virginia v. EPA*, Case No. 15-1363 (D.C. Cir. Order, Dec. 21, 2018).

¹³ *West Virginia v. EPA*, 136 S. Ct. 1000 (Feb 9, 2016).

¹⁴ <https://www.whitehouse.gov/presidential-actions/presidential-executive-order-promoting-energy-independence-economic-growth/>

¹⁵ [83 Fed. Reg. 44746.](https://www.federalregister.gov/documents/2018/08/01/83-Fed-Reg-44746)

¹⁶ Independent Review of 2018 Integrated Resource Plan, Exhibit 1-36 (Page 7) <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000231ujAAA>

¹⁷ ICC understands that Peabody Coal and ICARE will be filing comments on the 2018 IRP that mirror or summarize their respective prefiled testimony in the rate case.

¹⁸ Direct Testimony of Kelly Carmichael, Cause 45159, Page 13, lines 8-10.

- “The long-term strategic plan identifies expected energy and demand needs over a 20-year horizon and recommends a potential resource portfolio to meet those needs.”²³
- 3.25 All of the commodity price forecasts in the 2018 IRP are for 20 years or through 2040, not for 30 years.²⁴
- 3.36 All of the Aurora runs were performed for a 20-year period.²⁵ Aurora is the dispatch model that NIPSCO’s consultant licenses from Energy Exemplar and uses to determine dispatch and hence the generation mix. Aurora allows for dispatch analyses, subject to user specifications, to 2050.
- 3.26 NIPSCO did not ask its consultant to rerun the scenarios with Aurora for the 30-year period. Rather, the 20-year period was extended by 10 years through [REDACTED]. The result appears to inflate the NPV advantage for the preferred portfolio.
- 3.27 A significant share of the NPV advantage for the preferred portfolio over the Portfolio 1 (coal units stay in operation through expected lives) derives from the 10-year term extension. Assuming a 20-year planning period combined with all of the other changes described above, the NPV results would not be dispositive with respect to the preferred portfolio and would have a considerably lower customer rate impact.

²³ *Id.*, p. 23.

²⁴ *Id.*, Fig. 8-8 (Henry Hub), Fig. 8-11 (Coal), Fig. 8-12 (Carbon), Figs. 8-14 & 8-15 (Power), and Fig. 8-16 (Capacity).

²⁵ NIPSCO’s response to ICC 1-003 in Cause No. 45159.

4. NIPSCO WAS INDIFFERENT TO CONSIDERING A PATH THAT WOULD HAVE MITIGATED RATE SHOCK ON CUSTOMERS BY EXPLORING ALL OPTIONS RELATED TO MAINTAINING THE EXISTING COAL FLEET AS LONG AS POSSIBLE.

RECOMMENDATION #5

NIPSCO SHOULD BE REQUIRED TO DEMONSTRATE GOOD FAITH EFFORT TO MINIMIZE CUSTOMER IMPACTS AS MEASURED BY RESIDENTIAL CUSTOMER RATES.

- 4.1 Starting with its 2016 IRP and continuing through the 2018 IRP, NIPSCO has demonstrated a strong preference for the closure of its remaining coal fleet. This preference has manifested in several ways discussed above but bears repeating.
- The construction of the scenarios was biased. For example, the only scenario with zero carbon pricing was the Challenged Economy Scenario, which also assumes slow economic growth and high coal prices.
 - The commodity assumptions with respect to coal and carbon have been shown to disadvantage coal without justification.
 - The regulatory assumptions considered the worst cases including almost \$0.5 billion for a non-existent regulation and ignored actual and impending regulatory changes.
 - Regulatory compliance did not seek least-cost solutions or explore evolving options and strategies.
 - The methodology which considered retirement independent of replacement sequentially considered lower cost replacement resources in the retirement decisions and higher cost replacement options after the retirements were “locked in.”
 - NIPSCO failed to engage with a third party who expressed interest in purchasing two coal units in discussions [REDACTED] without any basis for dismissing such a consideration.
 - NIPSCO failed to determine the impact on customer rates by looking only at the NPV’s of the options.
 - NIPSCO disguised the impact on customers by extending the NPV analysis period from 20 to 30 years without any additional analysis.
- 4.2 NIPSCO showed no interest in finding solutions related to its existing coal fleet that would reduce customer impact. Such efforts would have included efforts to reduce operating costs, efforts to increase the dispatch of the coal units, and efforts to identify lower cost regulatory compliance options.
- 4.3 NIPSCO refused to engage in discussions with a third party that was interested in acquiring two of the coal units [REDACTED]. By refusing

to engage in a discussion about a [REDACTED], coal was not treated on a level playing field.

- 4.4 NIPSCO did not engage an investment banker to market the plants. Unlike NIPSCO, an investment banker would be motivated to market the properties given such transactions generally have a success fee component. The investment banker could assist in structuring a PPA to insure value to both sides.
- 4.5 This failure to pursue the possible sale of the coal plants for continued operation is a concern in other states. For example, a bill was recently passed in the Wyoming Legislature that requires a utility to offer the sale of a coal-fired power plant before the plant can be retired. The bill limits recovery of or earnings on the capital costs of new electric generation to replace coal-fired generation unless the utility made a good-faith effort to sell the facility. The bill also requires the utility to purchase the electricity generated by the purchased coal-fired facility at avoided cost.²⁶

²⁶ Wyoming Senate Enrolled Act No. 74, 65th Legislature, 2019.