RESOURCE PLAN

This section of the IRP includes:

- An overview of the resource planning analysis;
- The reference case (proposed plan);
- EGEAS input assumptions;
- Carbon scenarios contained in the analysis;
- Sensitivity cases under varied input assumptions;
- EGEAS modeling results;
- Robustness of the proposed plan;
- Energy mix by fuel type; and
- Carbon emission projections over time.

4.0 Overview of Analyses

Initially, IPL creates a chart for the study period comparing the system demand load forecast plus reserve obligations to existing generating capability before resource additions. This chart gives an indication of the amount of new resources required in the future. A graph of this data is provided below, and numeric values are provided in Appendix 8B.

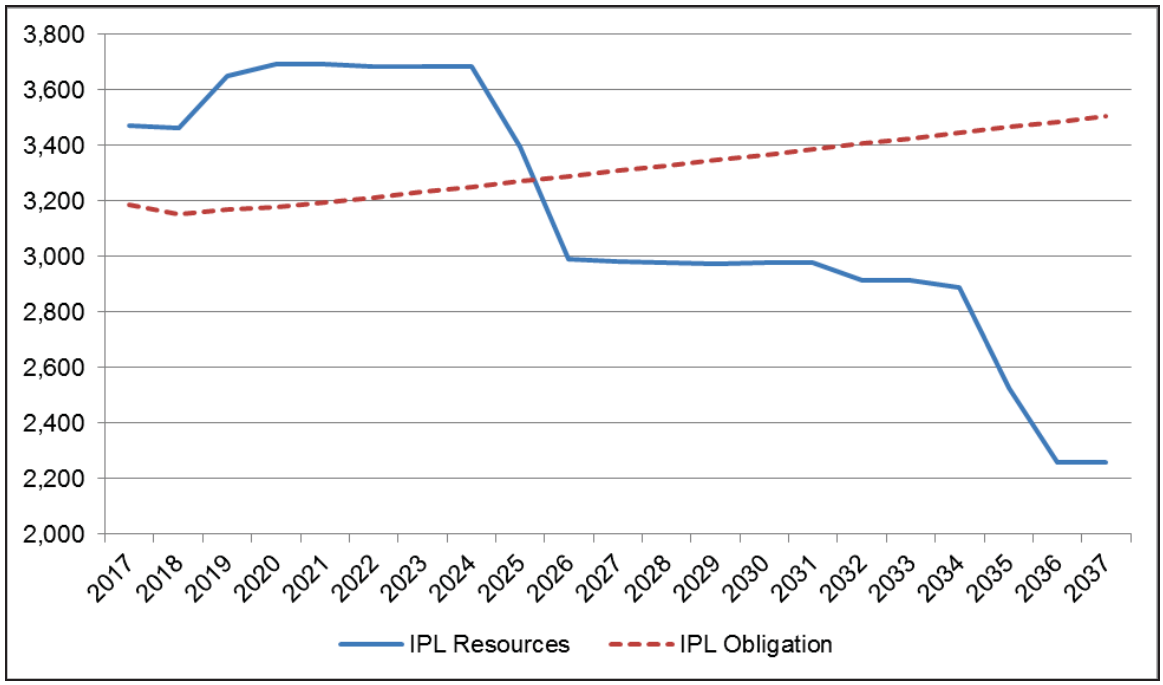

Figure 4.0.1 – IPL Load and Capability Projection Before Generic Resource Additions and New Wind II

With the addition of the Marshalltown Generating Station and IPL's 500 MW New Wind I Project, IPL does not project a capacity deficit until 2026. IPL assumes, for planning purposes, the retirement of **[TRADE SECRET DATA BEGINS**

. **TRADE SECRET DATA ENDS]** Also for planning purposes, IPL assumes that the Duane Arnold Energy Center ("DAEC") nuclear PPA expires at the end of the current term on December 31, 2025.[1] IPL projects its capacity deficit to increase from approximately 300 zonal resource credits (ZRCs) in 2026 to 560 ZRCs in 2034. After 2034, planning assumptions for additional large resource retirements drive the capacity deficit to approximately 1,250 ZRCs by the end of the study period in 2037.

To meet future requirements, IPL considered and evaluated various supply-side resource planning alternatives, including: renewables, fossil-fueled technologies, nuclear, and market purchases. The bulk of the analysis is done using EGEAS; IPL conducted numerous EGEAS runs, and each run looked at many plans.

The proposed plan evolved from consideration of the following resources as well as EGEAS optimized expansion planning analysis (along with IPL's existing resources):

- Wind;
- Biomass;
- Biogas;
- Solar;
- Simple Cycle;
- Combined Cycle;
- Integrated Gasification Combined Cycle;
- Pulverized Coal;
- Nuclear; and
- Purchased Power.

The optimum plan is based on having the lowest cumulative present worth given the assumptions for the 20-year study period plus a 40-year extension period.

4.1 Proposed Plan

IPL's plan to meet the demands of its customers requires modification to existing resources and new additions. The proposed 20-year resource plan, which is informed by the EGEAS reference case, is anticipated to include:

- Using existing owned generation with the exceptions of the retirements of the units noted below:
  - Centerville CTs 1 and 2 by the MISO 2018-2019 Planning Year;
  - Burlington CTs (Units 1, 2, 3, and 4) by the MISO 2018-2019 Planning Year;
  - Grinnell CT Units 1 and 2 for the MISO 2017-2018 Planning Year;
  - Fox Lake Units 1 and 3 by the MISO 2018-2019 Planning Year; and

[1] IPL has not made a final decision regarding an extension of the DAEC PPA at this time.

  - Red Cedar CT retired for the 2018-2019 Planning Year.[2]

- Ottumwa Generating Station: the SCR is currently under construction, and has an expected in-service at the end of 2018;
- For modeling purposes, **[TRADE SECRET DATA BEGINS TRADE SECRET DATA ENDS]** is assumed to be **[TRADE SECRET DATA BEGINS ; TRADE SECRET DATA ENDS]**
- For modeling purposes, Burlington is assumed to fuel switch to natural gas in 2021 and **[TRADE SECRET DATA BEGINS TRADE SECRET DATA ENDS]**
- Prairie Creek Unit 4 switched to natural gas in 2017, and **[TRADE SECRET DATA BEGINS ; TRADE SECRET DATA ENDS]**
- Prairie Creek Unit 3 fuel switch to natural gas in 2025, and **[TRADE SECRET DATA BEGINS TRADE SECRET DATA ENDS]**
- Marshalltown Generating Station, a nominal 630 MW combined-cycle, natural gas-fueled generating station, which was placed in service in 2017;
- Using forecasted DSM;
- Continue to develop PPA and owned wind portfolio:
  - Addition of 200 MW Turtle Creek PPA, which has an expected 2018 in-service date;
  - Develop up to 500 MW of new wind as approved by the Board in Docket No. RPU-2016-0005 (“New Wind I”) by 2020;
  - Develop up to 500 MW of additional new wind (“New Wind II Project”) by 2020, as proposed by IPL in Docket No. RPU-2017-0002;
- In the long-term:
  - Consider and add new generation as needed for capacity and energy needs. For example, the reference cases for all carbon scenarios call for new renewables (wind and solar), natural gas-fired resources (combustion turbine and combined cycle), and one year capacity purchases; and
  - Complete existing purchase power contracts, and evaluate potential extensions of existing purchase power contract or new purchase power contracts.

[2] After completion of the EGEAS modeling, IPL made the decision to retire Red Cedar at the end of 2018. Due to IPL’s capacity length, accelerating the retirement by one year does not present a capacity shortfall risk.

IPL will seek MISO approval to remove the proposed retiring generating units from the MISO grid via an Attachment Y filing. For accounting purposes, subsequent to MISO approval to remove the assets from the grid and IPL ceasing operations of the unit, IPL will retire/remove the assets from its accounting records consistent with applicable FERC regulations. IPL will potentially incur future removal and environmental costs for the above referenced generating unit assets; the estimated costs and timing of such are uncertain at this time.

IPL regularly evaluates its resource needs and makes modifications to its resource plan to address evolving conditions and requirements.

4.2 EGEAS Input Assumptions

The following sections highlight the major EGEAS assumptions in the 2017 IRP.

4.2.1 General EGEAS Settings

Highlights of general EGEAS settings include:

- 2017-2037 Study Period with 40-year extension period;
- 7.01% discount rate (After Tax Weighted Allocated Cost of Capital);
- 2016 Base Year; and
- 7.8% UCAP Planning Reserve Margin over MISO coincident peak with transmission losses (or for modeling purposes 10.721% Planning Reserve Margin over MISO coincident peak before 2.7% transmission losses).

4.2.2 Demand and Energy Forecast

Section 2 discusses in detail the development of IPL's load forecast.

IPL developed Base, Low, and High load forecasts, which are shown in the tables below. The Base Forecast grows by 308 MW over the study period, with ZRC obligations growing 318 ZRCs.[3] The High Forecast grows by 662 MW, with ZRC obligations growing 694 ZRCs. The Low Forecast declines 14 MW, with ZRC obligations declining 24 ZRCs.

IPL models expanding interruptible and direct load control (DLC) programs in EGEAS as supply-side resources as shown in Appendix 8C.

[3] The Base Forecast assumes continued service to the Minnesota wholesale load through the study period.

Table 4.2.2.1: EGEAS Demand and Energy Forecast, Base Forecast

Year	IPL Energy, GWH	IPL Internal Peak Demand (with TM losses)	load factor	reduction for MISO Coincident (95.96%)	reduction for 2.71% TM losses (added later)	Adj Net MISO Coincident Demand w/o TM losses	Weighted LBA TM losses	MISO Planning Reserve Margin	ZRC Obligation	EGEAS Reserve Margin: ZRC obligation / IPL adj net MISO Coincident Peak - 1
2017	17081	3083.7	63%	-124.5	-79.5	2879.7	2.71%	7.80%	3188.4	10.7214%
2018	16858	3048.1	63%	-123.1	-78.7	2846.2	2.71%	7.80%	3151.4	10.7214%
2019	16788	3065.0	63%	-123.8	-79.0	2862.2	2.71%	7.80%	3169.1	10.7214%
2020	16925	3075.3	63%	-124.2	-79.3	2871.8	2.71%	7.80%	3179.7	10.7214%
2021	17031	3091.0	63%	-124.8	-79.7	2886.5	2.71%	7.80%	3196.0	10.7214%
2022	17145	3108.1	63%	-125.5	-80.2	2902.4	2.71%	7.80%	3213.6	10.7214%
2023	17214	3126.0	63%	-126.3	-80.7	2919.0	2.71%	7.80%	3232.0	10.7214%
2024	17335	3144.1	63%	-127.0	-81.1	2936.0	2.71%	7.80%	3250.8	10.7214%
2025	17459	3162.4	63%	-127.7	-81.5	2953.2	2.71%	7.80%	3269.8	10.7214%
2026	17585	3180.9	63%	-128.5	-82.0	2970.5	2.71%	7.80%	3289.0	10.7214%
2027	17676	3199.5	63%	-129.2	-82.6	2987.7	2.71%	7.80%	3308.0	10.7214%
2028	17768	3218.2	63%	-130.0	-82.9	3005.3	2.71%	7.80%	3327.5	10.7214%
2029	17860	3237.0	63%	-130.7	-83.5	3022.8	2.71%	7.80%	3346.9	10.7214%
2030	17953	3256.0	63%	-131.5	-84.0	3040.5	2.71%	7.80%	3366.5	10.7214%
2031	18046	3275.0	63%	-132.3	-84.4	3058.3	2.71%	7.80%	3386.2	10.7214%
2032	18139	3294.1	63%	-133.0	-85.0	3076.1	2.71%	7.80%	3405.9	10.7214%
2033	18233	3313.4	63%	-133.8	-85.5	3094.1	2.71%	7.80%	3425.8	10.7214%
2034	18328	3332.8	63%	-134.6	-86.0	3112.2	2.71%	7.80%	3445.9	10.7214%
2035	18423	3352.3	63%	-135.4	-86.5	3130.4	2.71%	7.80%	3466.0	10.7214%
2036	18519	3371.9	63%	-136.2	-87.0	3148.7	2.71%	7.80%	3486.3	10.7214%
2037	18615	3391.6	63%	-137.0	-87.4	3167.2	2.71%	7.80%	3506.8	10.7214%

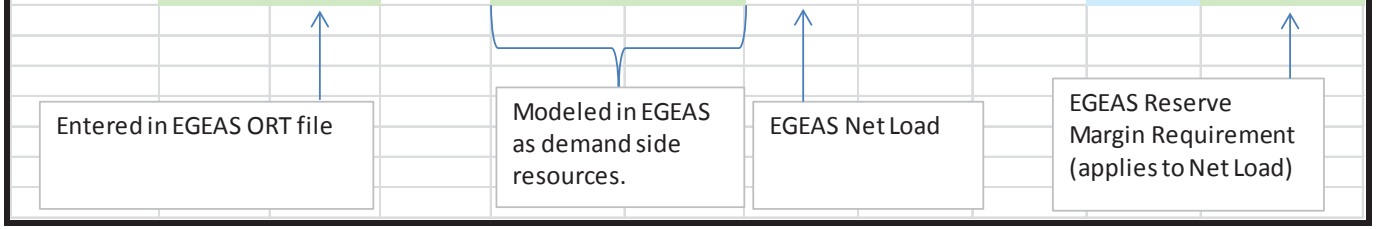

Table 4.2.2.2: High Forecast

Year	IPL Energy, GWH	IPL Internal Peak Demand (with TM losses)	load factor	reduction for MISO Coincident (95.96%)	reduction for 2.71% TM losses (added later)	Adj Net MISO Coincident Demand w/o TM losses	Weighted LBA TM losses	MISO Planning Reserve Margin	ZRC Obligation	EGEAS Reserve Margin: ZRC obligation / IPL adj net MISO Coincident Peak - 1
2017	17081	3083.7	63%	-124.5	-79.5	2879.7	2.71%	7.80%	3188.4	10.7214%
2018	16944	3063.5	63%	-123.7	-78.7	2861.0	2.71%	7.80%	3167.7	10.7214%
2019	16958	3095.8	63%	-125.0	-79.0	2891.8	2.71%	7.80%	3201.8	10.7214%
2020	17181	3121.7	63%	-126.1	-79.3	2916.3	2.71%	7.80%	3229.0	10.7214%
2021	17375	3153.3	63%	-127.4	-79.7	2946.2	2.71%	7.80%	3262.1	10.7214%
2022	17578	3186.5	63%	-128.7	-80.2	2977.6	2.71%	7.80%	3296.8	10.7214%
2023	17736	3220.7	63%	-130.1	-80.7	3009.9	2.71%	7.80%	3332.6	10.7214%
2024	17949	3255.5	63%	-131.5	-81.1	3042.9	2.71%	7.80%	3369.1	10.7214%
2025	18168	3290.8	63%	-132.9	-81.5	3076.3	2.71%	7.80%	3406.2	10.7214%
2026	18390	3326.5	63%	-134.4	-82.0	3110.1	2.71%	7.80%	3443.6	10.7214%
2027	18577	3362.5	63%	-135.8	-82.6	3144.1	2.71%	7.80%	3481.2	10.7214%
2028	18766	3399.0	63%	-137.3	-82.9	3178.8	2.71%	7.80%	3519.6	10.7214%
2029	18957	3435.9	63%	-138.8	-83.5	3213.6	2.71%	7.80%	3558.1	10.7214%
2030	19150	3473.1	63%	-140.3	-84.0	3248.9	2.71%	7.80%	3597.2	10.7214%
2031	19346	3510.8	63%	-141.8	-84.4	3284.6	2.71%	7.80%	3636.7	10.7214%
2032	19543	3548.9	63%	-143.3	-85.0	3320.5	2.71%	7.80%	3676.6	10.7214%
2033	19742	3587.4	63%	-144.9	-85.5	3357.0	2.71%	7.80%	3716.9	10.7214%
2034	19943	3626.3	63%	-146.5	-86.0	3393.9	2.71%	7.80%	3757.7	10.7214%
2035	20146	3665.6	63%	-148.1	-86.5	3431.1	2.71%	7.80%	3799.0	10.7214%
2036	20351	3705.4	63%	-149.7	-87.0	3468.7	2.71%	7.80%	3840.6	10.7214%
2037	20559	3745.6	63%	-151.3	-87.4	3506.9	2.71%	7.80%	3882.9	10.7214%

Entered in EGEAS ORT file

Modeled in EGEAS as demand side resources.

EGEAS Net Load

EGEAS Reserve Margin Requirement (applies to Net Load)

Table 4.2.2.3: Low Forecast

Year	IPL Energy, GWH	IPL Internal Peak Demand (with TM losses)	load factor	reduction for MISO Coincident (95.96%)	reduction for 2.71% TM losses (added later)	Adj Net MISO Coincident Demand w/o TM losses	Weighted LBA TM losses	MISO Planning Reserve Margin	ZRC Obligation	EGEAS Reserve Margin: ZRC obligation / IPL adj net MISO Coincident Peak - 1
2017	17081	3083.7	63%	-124.5	-79.5	2879.7	2.71%	7.80%	3188.4	10.7214%
2018	16773	3032.6	63%	-122.5	-78.7	2831.4	2.71%	7.80%	3135.0	10.7214%
2019	16619	3034.3	63%	-122.6	-79.0	2832.8	2.71%	7.80%	3136.5	10.7214%
2020	16671	3029.4	63%	-122.4	-79.3	2827.7	2.71%	7.80%	3130.9	10.7214%
2021	16693	3029.7	63%	-122.4	-79.7	2827.7	2.71%	7.80%	3130.8	10.7214%
2022	16721	3031.3	63%	-122.4	-80.2	2828.7	2.71%	7.80%	3132.0	10.7214%
2023	16705	3033.6	63%	-122.5	-80.7	2830.3	2.71%	7.80%	3133.8	10.7214%
2024	16738	3035.9	63%	-122.6	-81.1	2832.3	2.71%	7.80%	3135.9	10.7214%
2025	16775	3038.5	63%	-122.7	-81.5	2834.3	2.71%	7.80%	3138.2	10.7214%
2026	16812	3041.1	63%	-122.8	-82.0	2836.3	2.71%	7.80%	3140.4	10.7214%
2027	16815	3043.7	63%	-122.9	-82.6	2838.1	2.71%	7.80%	3142.4	10.7214%
2028	16818	3046.2	63%	-123.0	-82.9	2840.3	2.71%	7.80%	3144.8	10.7214%
2029	16821	3048.8	63%	-123.1	-83.5	2842.2	2.71%	7.80%	3146.9	10.7214%
2030	16824	3051.4	63%	-123.2	-84.0	2844.2	2.71%	7.80%	3149.1	10.7214%
2031	16827	3054.0	63%	-123.3	-84.4	2846.2	2.71%	7.80%	3151.4	10.7214%
2032	16831	3056.6	63%	-123.5	-85.0	2848.1	2.71%	7.80%	3153.5	10.7214%
2033	16834	3059.1	63%	-123.6	-85.5	2850.1	2.71%	7.80%	3155.7	10.7214%
2034	16837	3061.7	63%	-123.7	-86.0	2852.1	2.71%	7.80%	3157.9	10.7214%
2035	16840	3064.3	63%	-123.8	-86.5	2854.1	2.71%	7.80%	3160.1	10.7214%
2036	16843	3066.9	63%	-123.9	-87.0	2856.1	2.71%	7.80%	3162.3	10.7214%
2037	16847	3069.5	63%	-124.0	-87.4	2858.1	2.71%	7.80%	3164.6	10.7214%

Entered in EGEAS ORT file

Modeled in EGEAS as demand side resources.

EGEAS Net Load

EGEAS Reserve Margin Requirement (applies to Net Load)

4.2.3 Emissions Costs and Limits

For the 2017 IRP, IPL performed sensitivity analysis under three sets of carbon futures. The sensitivity analysis is consistent with the analysis IPL performed in support of for regulatory filings for approval of resource additions in Iowa.

- The "a" series future takes Wood Mackenzie's fuel and market energy price forecasts under a No Carbon long-term outlook and adjusts dispatch of existing units so that CO_2 emissions on these units ramp down 34% from 2012 levels by 2030. This future acts as a proxy for potential future federal implementation of a comprehensive policy to regulate carbon dioxide.
- The "b" series future is similar to the "a" series, but does not include the CO_2 ramp down on existing units.
- The "c" series future takes Wood Mackenzie's fuel and market energy price forecasts under a carbon monetization outlook. In this future, the CO_2 ramp down on the existing units is removed due to the carbon monetization.

Appendix 4A provides the modeled CO_2 limits for the "a" series future and the CO_2 prices modeled in the "c" series future.

In the No Carbon and Wood Mackenzie 2027 Carbon scenarios, emission costs for SO_2 and NO_x are based on Wood Mackenzie projections. However, due to significant fleet changes resulting from regulations such as Mercury Air Toxics Standards ("MATS") triggering retrofits, fuel switching, and retirements of units, Wood Mackenzie's SO_2 and NO_x prices are $0 indicating a significant supply surplus expected for future trading.

The modeling includes no externalities (besides the CO_2 monetization in the "c" series) as there is no explicit externality pricing in Iowa.

4.2.4 Natural Gas, Coal, Market Energy, and Market Capacity Costs

Appendix 4A provides the natural gas cost prices, which are based on Wood Mackenzie projections. Natural gas prices are shown for Emery, which is the same as a new generic combined cycle or combustion turbine. Appendix 4A also identifies the basis pricing for existing natural gas-fired units relative to Emery.

Long-term coal fuel costs are based on Wood Mackenzie projections with additional input from the Alliant Energy coal resources department. Modeled coal prices are provided in Appendix 4A.

Market Economy Energy Costs are based on Wood Mackenzie projections, and shown in Appendix 4A. In order to avoid over-reliance on Market Energy, the EGEAS modeling includes a ramp-down of available Market Energy to roughly 5% of the energy portfolio over the long-term.

Market Capacity Costs are based on Wood Mackenzie projections, and are shown in Appendix 4A. One-year peak power purchases are limited to 150 ZRCs per year. These market capacity purchases are represented in EGEAS as one-year peak power purchases with no energy.

4.2.5 Capital and O&M Change Rates

Capital and Operations and Maintenance (O&M) Change Rates are noted in Appendix 3D.

4.2.6 New Generic Units

New Generic Unit costs and parameters are noted in Appendix 3C. Much of this data comes from the 2013 Power Station Characterization Study performed by Black & Veatch, 2016 NREL-ATB information for solar, and IPL's potential wind projects.

4.2.7 Power Purchase Agreements

For planning purposes, IPL assumes that major PPAs expire at the end of their term.

4.2.8 Existing Units

Appendix 4B lists IPL's Existing Generating Units, as well as purchases and sales. Appendix 4B also provides the modeled 2017 Zonal Resource Credits under the MISO Module E Resource Adequacy construct and dispatch parameters.

Further, Appendix 4B lists noteworthy changes to existing units over the study period, dispatch modifiers used to represent LMP/dispatch biases, and forward modeling assumptions for IPL's expanding wind portfolio. Appendix 8E provides a comparison of retirement assumptions from the 2017 and previous resource plans.

4.3 Scenarios

As previously explained, IPL performed the sensitivity analysis, for this IRP, under three sets of Carbon futures: "a" series – dispatch of existing units modified for CO_2 ramp-down; "b" series – dispatch of existing units not modified for CO_2 ramp-down; and "c" series – Wood Mackenzie 2027 CO_2 monetization. As a result, there is no longer one base case. Instead, there are three sets of carbon scenarios with sensitivities for each scenario.

4.4 Sensitivities

Sensitivities take the base assumptions and vary key inputs. Expansion plans and summary costs are presented for the following 26 sensitivities:

- Base Forecast (Reference Case)
- High Load Forecast
- Low Load Forecast
- No Economy Energy
- Higher Natural Gas Fuel Prices +30%
- Higher Natural Gas Fuel Prices +20%
- Higher Natural Gas Fuel Prices +10%
- Lower Natural Gas Fuel Prices -10%
- Lower Natural Gas Fuel Prices -20%
- Lower Natural Gas Fuel Prices -30%
- Higher Coal Fuel Prices +30%
- Higher Coal Fuel Prices +20%
- Higher Coal Fuel Prices +10%
- Lower Coal Fuel Prices -10%
- Lower Coal Fuel Prices -20%
- Lower Coal Fuel Prices -30%
- Higher New Unit Capital Costs +10%
- Lower New Unit Capital Costs -10%
- Higher Wind Prices +$10/MWh
- Higher Wind Prices +$5/MWh
- Lower Wind Prices -$5/MWh
- Lower Wind Prices -$10/MWh
- Higher Solar Prices +$10/MWh
- Higher Solar Prices +$5/MWh
- Lower Solar Prices -$5/MWh
- Lower Solar Prices -$10/MWh

EGEAS results, including present value revenue requirement (PVRR) summary tables, expansion plan summary tables, and individual case expansion plans are provided in Appendix 4C. Details of the sensitivity runs are discussed below.

4.4(a) Base Assumptions (Reference Cases)

The Base Assumptions Case (Reference Case) for the three carbon scenarios was based on reasonable assumptions and was built to represent a combination of assumptions that was probable at the time of plan development. Annual by-unit production costs for the three carbon scenarios are shown in Appendices 4D, 4E and 4F.

Expansion plans for the Base Case in the "a", "b", and "c" carbon futures generally identify:

- 700-900 MWs of wind additions in the short-term, in particular while federal production tax credit (PTC) opportunities are still strong;
- Followed by 400-700 MWs of solar additions over the study period;
- One or two 192 MW combustion turbine additions, with the first addition as soon as 2026;
- Later one-year capacity purchases; and
- A 600 MW combined cycle unit in 2035, toward the end of the study period.

4.4(b) High Load Forecast

Starting with the Reference Case assumptions, the high load forecast replaced the base load forecast in the Reference Case and then existing and potential future resources were optimized. The total cumulative present worth cost of these sensitivities for the study period plus the 40-year extension (PVRR) was roughly $1,000 million higher than the Reference Case for the various carbon scenarios. The expansion plans for the "a" and "b" carbon futures increased one year capacity purchases, solar resources, and added a 2030 combustion turbine to accommodate the higher load. The expansion plan for the "c" carbon future decreased one year capacity purchases, and increased wind and solar resources with an additional CT in 2026.

4.4(c) Low Load Forecast

Starting with the Reference Case assumptions, the low load forecast replaced the base load forecast in the Reference Case and then existing and potential future resources were optimized. The total PVRR of these sensitivities was roughly $900 million lower than the Reference Case case for the various carbon scenarios. The expansion plans dropped the 2035 combined cycle unit and any 2026 selected combustion turbine, while increasing deployment of combustion turbines by one or two 192 MW units (for a total of three or four units) toward the end of the study period. The "a" and "b" carbon futures show increased reliance on solar, while the "c" carbon future, with its selection of two additional 192 MW combustion turbines (for a total of four), has less reliance on new solar and one year capacity purchases.

4.4(d) No Economy Energy

Starting with the Reference Case assumptions, all energy was assumed to be served by IPL resources (in other words, no market economy energy was available throughout the study period) and the model optimized existing and potential future resources. The total PVRR of these sensitivities was roughly $140 million higher than the Reference Case for the various carbon scenarios. The expansion plans did not change materially from the Reference Case.

4.4(e) Higher Natural Gas Prices

Starting with the Reference Case assumptions, existing and potential future resources were optimized with natural gas prices 10, 20, and 30 percent higher in all years. The PVRRs of these sensitivities were higher than the reference cases:

- Roughly $200 million higher in the +10% sensitivity,
- Roughly $400 million higher in the +20% sensitivity, and
- Roughly $600 million higher in the +30% sensitivity.

Expansion plans in these sensitivity runs, depending on the natural gas price increase, reduced or eliminated combustion turbine additions generally in favor or wind and solar additions.

4.4(f) Lower Natural Gas Prices

Starting with the Reference Case assumptions, existing and potential future resources were optimized with natural gas prices 10, 20, and 30 percent lower in all years. The PVRRs of these sensitivities were lower than the reference cases:

- Roughly $280 million lower in the -10% sensitivity,
- Roughly $640 million lower in the -20% sensitivity, and
- Roughly $1,080 million lower in the -30% sensitivity.

Compared to the reference cases, expansion plans in these sensitivity runs were about the same for the -10% sensitivity, but the -20% and -30% runs increased combustion turbine deployment by one unit, with somewhat less reliance on new wind, new solar, and one year capacity purchases.

4.4(g) Higher Coal Fuel Prices

Starting with the Reference Case assumptions, existing resources were optimized with coal fuel prices 10, 20, and 30 percent higher in all years. The PVRRs of these sensitivities were higher than the reference cases:

- Roughly $150 million higher in the +10% sensitivity,
- Roughly $260 million higher in the +20% sensitivity, and
- Roughly $350 million higher in the +30% sensitivity.

Expansion plans in these sensitivity runs were largely similar to the reference cases; however, the +30% sensitivity in the “a” and “b” future dropped the 2026 combustion turbine in favor of additional wind, solar, and one year capacity purchases.

4.4(h) Lower Coal Fuel Prices

Starting with the Reference Case assumptions, existing resources were optimized with coal fuel prices 10, 20, and 30 percent lower in all years. The PVRRs of these sensitivities were lower than the reference cases:

- Roughly $160 million lower in the -10% sensitivity,
- Roughly $330 million lower in the -20% sensitivity, and
- Roughly $500 million lower in the -30% sensitivity.

Expansion plans in these sensitivity runs were largely similar to the reference cases.

4.4(i) Higher New Unit Capital Costs +10%

Starting with the Reference Case assumptions, existing and potential future resources were optimized with capital costs for new generic units 10% higher in all years. The total PVRR of these sensitivities was roughly $250 million higher than the Reference Case for the various carbon scenarios. The expansion plans did not significantly change from the Reference Case.

4.4(j) Lower New Unit Capital Costs -10%

Starting with the Reference Case assumptions, existing and potential future resources were optimized with capital costs for new generic units 10% lower in all years. The total PVRR of these sensitivities was roughly $290 million lower than the Reference Case for the various carbon scenarios. Relative to the Reference Case for each future, the expansion plans dropped one combustion turbine, and increased reliance on new wind and solar.

4.4(k) Higher Wind Prices

Starting with the Reference Case assumptions, existing and potential future resources were optimized with new wind prices assumed $10 and $5 per MWh higher. The PVRRs of these sensitivities were higher than the reference cases:

- Roughly $150 million higher in the +$5 per MWh sensitivity, and
- Roughly $190-$280 million higher in the +$10 per MWh sensitivity.

As expected, higher wind prices resulted in decreased wind additions in the expansion plans, with solar additions and one year capacity purchases acting in the balance.

4.4(l) Lower Wind Prices

Starting with the Reference Case assumptions, existing and potential future resources were optimized with new wind prices assumed $5 and $10 per MWh lower. The PVRRs of these sensitivities were lower than the reference cases:

- Roughly $170-210 million lower in the -$5 per MWh sensitivity, and
- Roughly $380-470 million lower in the -$10 per MWh sensitivity.

As expected, lower wind prices result in increased wind additions in the expansion plans. In the “a” and “b” futures, the increased wind additions also resulted in the reduction of one combustion turbine from the expansion plan, with increased reliance on solar and one year capacity purchases. In the “c” future,

the increased wind additions resulted in eliminating the addition of the combined cycle unit, while increasing solar and combustion turbine additions, with less reliance on one year capacity purchases.

4.4(m) Higher Solar Prices

Starting with the Reference Case assumptions, existing and potential future resources were optimized with new solar prices assumed $5 and $10 per MWh higher. The PVRRs of these sensitivities were higher than the reference cases:

- Roughly $25-$50 million higher in the +$5 per MWh sensitivity, and
- Roughly $50-$80 million higher in the +$10 per MWh sensitivity.

In most cases, the higher solar prices acted to somewhat delay solar deployment. In the “c” future +$10 per MWh sensitivity case, solar deployment was delayed and reduced, resulting in a combustion turbine selection in 2026.

4.4(n) Lower Solar Prices

Starting with the Reference Case assumptions, existing and potential future resources were optimized with new solar prices assumed $5 and $10 per MWh lower. The PVRRs of these sensitivities were lower than the reference cases:

- Roughly $50 million lower in the -$5 per MWh sensitivity, and
- Roughly $110-125 million lower in the -$10 per MWh sensitivity.

As expected, lower solar prices resulted in increased solar additions. The increased solar additions eliminated the need for one 192 MW combustion turbine in the expansion plans.

4.5 Robustness of Proposed Plan

The proposed plan, as supported by the different scenarios, is very robust. The load and capability graph after resource additions resulting from the Reference Case is shown below, and numerically in Appendix 8A.

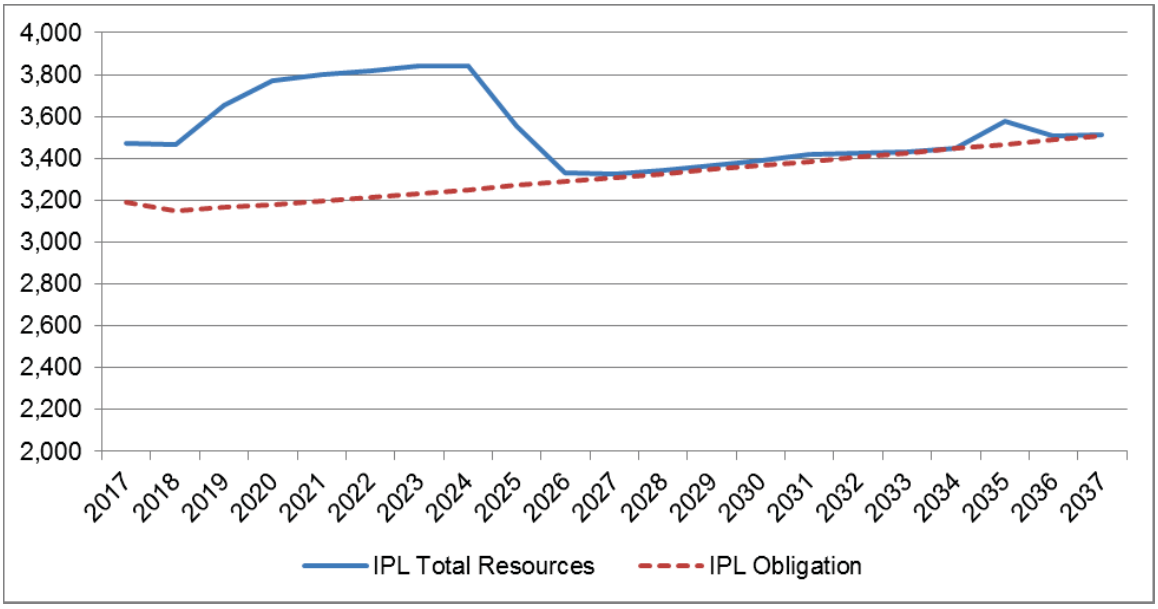

Figure 4.5.1 – IPL Load and Capability Projection After Generic Resource Additions

Diversity in fuels and technologies insulates against adverse movements in any one particular area, which is advantageous when attempting to maintain a portfolio that is cost-effective and reliable to meet the needs of IPL's customers. Furthermore, EGEAS optimally selected 500 MW of new wind in 2020 in 73 of the 78 cases. These results demonstrate that IPL's proposed New Wind II project is a reasonable and cost-effective resource addition, given the costs of alternatives modeled and the varying assumptions analyzed.

EGEAS did not economically select 100% PTC wind by 2020 in only one of the 78 sensitivity cases. This case assumes +$10/MWh higher wind costs than the base assumptions. However, IPL has proposed a cost cap for New Wind II that is close to the base modeling assumptions in EGEAS, so a $10/MWh increase in cost would exceed the cost cap.

4.6 Energy Mix

IPL's 2017 Resource Plan continues to move IPL toward a generating fleet that relies less on market energy, as shown in the tables and figures below.

Table 4.6.1 – "a" Series Reference Case, Annual Energy Production by Fuel Type

Year	Coal	Nuclear	Gas	Market	Solar	Wind
2017	41%	20%	6%	21%	0%	12%
2018	40%	20%	9%	19%	0%	12%
2019	35%	20%	7%	16%	0%	21%
2020	26%	20%	13%	3%	0%	38%
2021	24%	19%	12%	3%	0%	41%
2022	21%	19%	14%	4%	1%	41%
2023	21%	19%	13%	4%	1%	41%
2024	24%	19%	10%	5%	1%	40%
2025	24%	19%	10%	5%	1%	40%
2026	30%	0%	23%	5%	1%	40%
2027	30%	0%	25%	5%	1%	38%
2028	30%	0%	25%	6%	2%	37%
2029	29%	0%	26%	6%	3%	36%
2030	29%	0%	26%	6%	3%	36%
2031	28%	0%	26%	6%	4%	36%
2032	28%	0%	26%	6%	4%	36%
2033	28%	0%	26%	6%	4%	36%

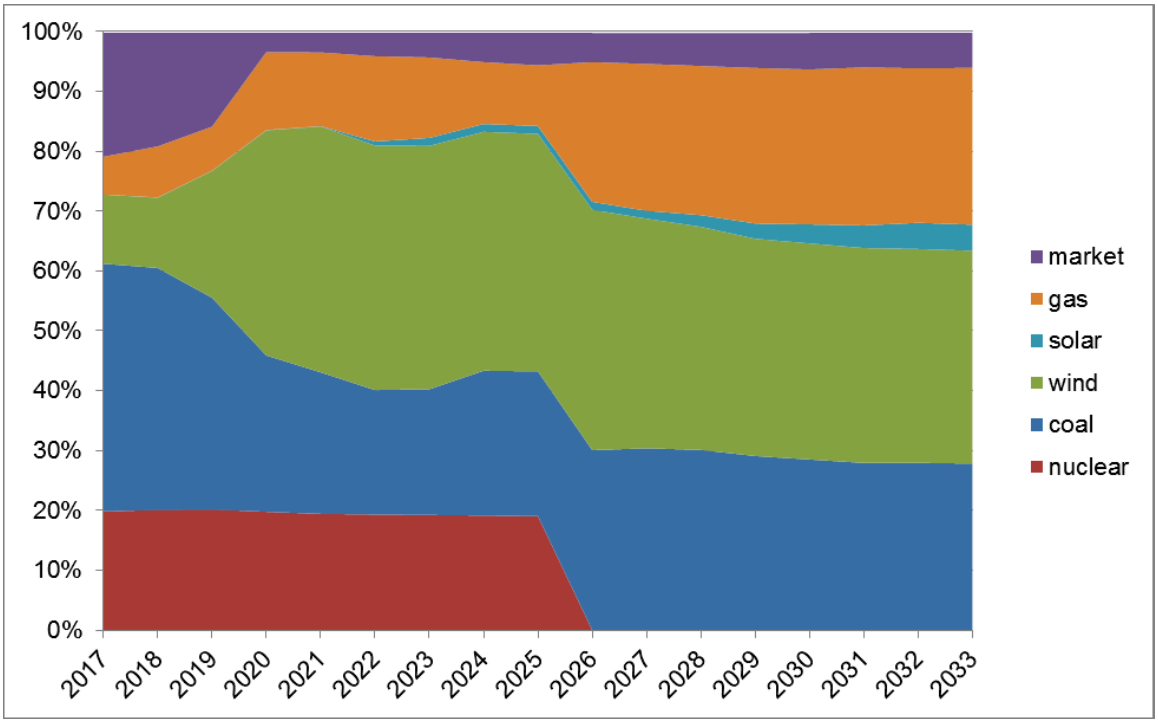

Figure 4.6.1 – "a" Series Reference Case, Annual Energy Production by Fuel Type

4.7 Carbon Emissions

IPL's projected annual CO_2 output (tons), in even its No Carbon Case (as a conservative look), notably declines over 15 years even as IPL's energy demand grows. Therefore, IPL's projected CO_2 ton/MWh rate also declines over the study period. Note that the projected 2026 step-change is a result of the modeling assumption that a nuclear PPA will expire at its current term and will not extend.

Table 4.7.1 – "b" Series, No Carbon Reference Case, CO_2 Emissions and Rate

Year	CO_2 Emissions, Tons	GWH Energy	Tons/ MWh
2017	11,690,678	17,081	0.68
2018	11,145,990	16,858	0.66
2019	9,570,406	16,788	0.57
2020	6,449,203	16,925	0.38
2021	6,038,329	17,031	0.35
2022	5,757,828	17,145	0.34
2023	5,801,870	17,214	0.34
2024	6,335,767	17,335	0.37
2025	6,469,766	17,459	0.37
2026	8,376,436	17,585	0.48
2027	8,647,323	17,676	0.49
2028	8,753,688	17,768	0.49
2029	8,820,495	17,860	0.49
2030	8,811,892	17,953	0.49
2031	8,851,171	18,046	0.49
2032	8,916,312	18,139	0.49
2033	8,936,163	18,233	0.49

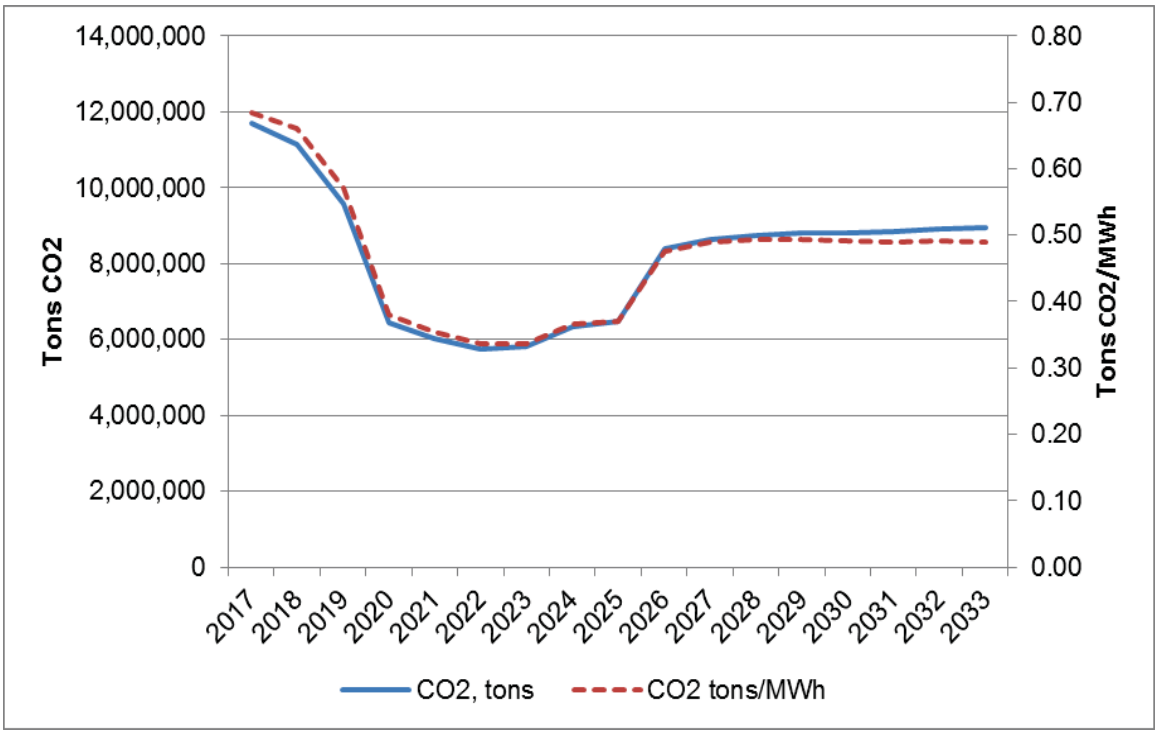

Figure 4.7.1 – "b" Series, No Carbon Reference Case, CO_2 Emissions and Rate

IPL 2017 IRP
Natural Gas Prices, Annual Average, $/MBTU

Developed from Wood Mackenzie H2 2016 Long Term Outlooks (released early 2017), for MISO Iowa

year	"a" and "b" series futures, WM No Carbon Case $/MBTU	"c" series future, WM 2027 Carbon Case $/MBTU	vs EGS	Location:
[TRADE SECRET DATA BEGINS			[TRADE SECRET DATA BEGINS	
2017				EMERY, new gas units
2018				Mtown CC&CTs 2017
2019				FOX LAKE
2020				Cedar Rapids Red Cedar, Prairie Creek
2021				BURLINGTON
2022				ML KAPP 2
2023				Grinnell
2024			TRADE SECRET DATA ENDS]	
2025			fixed basis adder values per Gas Trading & Dispatch knowledge	
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				
2036				
2037				

TRADE SECRET DATA ENDS]

Fuel prices shown above are annual averages.
EGEAS modeling includes a segment profile so that monthly values are modeled for each year.
The monthly segment profiles vary by year consistent with Wood Mackenzie data.

IPL 2017 IRP
Natural Gas Prices, Monthly, $/MBTU

Developed from Wood Mackenzie H2 2016 Long Term Outlooks (released early 2017), for MISO Iowa

"a" and "b" series futures
WM No Carbon Case

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
[TRADE SECRET DATA BEGINS													
2017													
2018													
2019													
2020													
2021													
2022													
2023													
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2031													
2032													
2033													
2034													
2035													
2036													

TRADE SECRET DATA ENDS]

"c" series future
WM 2027 Carbon Case

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
[TRADE SECRET DATA BEGINS													
2017													
2018													
2019													
2020													
2021													
2022													
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2033													
2034													
2035													
2036													

TRADE SECRET DATA ENDS]

IPL 2017 IRP
Coal Prices $/MBTU, Heat Contents btu/lb

Developed from Wood Mackenzie H2 2016 Long Term Outlooks and input from Alliant Energy Coal Resources department

year	**Ottumwa** "a" and "b" series futures, WM No Carbon Case **$/MBTU**	**8400** "c" series future, WM 2027 Carbon Case **$/MBTU**	**Lansing 4** "a" and "b" series futures, WM No Carbon Case **$/MBTU**	**8400** "c" series future, WM 2027 Carbon Case **$/MBTU**	**Burlington** "a" and "b" series futures, WM No Carbon Case **$/MBTU**	**8400** "c" series future, WM 2027 Carbon Case **$/MBTU**	**Pr Creek** "a" and "b" series futures, WM No Carbon Case **$/MBTU**	**8800** "c" series future, WM 2027 Carbon Case **$/MBTU**	**Louisa** "a" and "b" series futures, WM No Carbon Case **$/MBTU**	**8400** "c" series future, WM 2027 Carbon Case **$/MBTU**	**Neal 3&4** "a" and "b" series futures, WM No Carbon Case **$/MBTU**	**8400** "c" series future, WM 2027 Carbon Case **$/MBTU**
	[TRADE SECRET DATA BEGINS											
2017												
2018												
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2020												
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TRADE SECRET DATA ENDS]

IPL 2017 IRP
Market Energy Prices, Annual Average, $/MWH

Developed from Wood Mackenzie H2 2016 Long Term Outlooks (released early 2017), for MISO Iowa

	On Peak		Off Peak	
year	"a" and "b" series futures, WM No Carbon Case $/MWH	"c" series future, WM 2027 Carbon Case $/MWH	"a" and "b" series futures, WM No Carbon Case $/MWH	"c" series future, WM 2027 Carbon Case $/MWH
	TRADE SECRET DATA BEGINS		[TRADE SECRET DATA BEGINS	
2017				
2018				
2019				
2020				
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2035				
2036				
2037	TRADE SECRET DATA ENDS]		TRADE SECRET DATA ENDS]	

[TRADE SECRET DATA BEGINS

TRADE SECRET DATA ENDS]

Market energy prices shown above are annual averages.
EGEAS modeling includes a segment profile so that monthly values are modeled for each year.
The monthly segment profiles vary by year consistent with Wood Mackenzie data.

IPL 2017 IRP
Market Energy Prices, Monthly, $/MWH

Developed from Wood Mackenzie H2 2016 Long Term Outlooks, for MISO Iowa

On Peak
"a" and "b" series futures
WM No Carbon Case

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
[TRADE SECRET DATA BEGINS													
2017													
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2019													
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2035													
2036													

TRADE SECRET DATA ENDS]

On Peak
"c" series future
WM 2027 Carbon Case

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
[TRADE SECRET DATA BEGINS													
2017													
2018													
2019													
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2035													
2036													

TRADE SECRET DATA ENDS]

Off Peak
"a" and "b" series futures
WM No Carbon Case

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
[TRADE SECRET DATA BEGINS													
2017													
2018													
2019													
2020													
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2032													
2033													
2034													
2035													
2036													

TRADE SECRET DATA ENDS]

Off Peak
"c" series future
WM 2027 Carbon Case

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
[TRADE SECRET DATA BEGINS													
2017													
2018													
2019													
2020													
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2033													
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2036													

TRADE SECRET DATA ENDS]

IPL 2017 IRP
Capacity Prices (pure capacity no energy)

Applies to 1 Year Peak Power Purchases
Developed from Wood Mackenzie H2 2016 Long Term Outlooks (released early 2017), for MISO Zone 3 (Iowa)

year	$/kW-yr
[TRADE SECRET DATA BEGINS	
2017	
2018	
2019	
2020	
2021	
2022	
2023	
2024	
2025	
2026	
2027	
2028	
2029	
2030	
2031	
2032	
2033	
2034	
2035	
2036	
2037	

TRADE SECRET DATA ENDS]

SO2 costs, NOx, other emissions, all futures:

$0/ton all years, all futures
Per Wood Mackenzie H2 2016 Long Term Outlooks

CO2 Costs, $/short ton:

Developed from Wood Mackenzie H2 2016 Long Term Outlooks

year	"a" and "b" series futures, WM No Carbon Case	"c" series future, WM 2027 Carbon Case [TRADE SECRET DATA BEGINS
2017	$0.00	
2018	$0.00	
2019	$0.00	
2020	$0.00	
2021	$0.00	
2022	$0.00	
2023	$0.00	
2024	$0.00	
2025	$0.00	
2026	$0.00	
2027	$0.00	
2028	$0.00	
2029	$0.00	
2030	$0.00	
2031	$0.00	
2032	$0.00	
2033	$0.00	
2034	$0.00	
2035	$0.00	
2036	$0.00	
2037	$0.00	

TRADE SECRET DATA ENDS]

CO2 emissions limits for existing units in the series "a" future:

Clean Power Plan - 2012 Baseline Data for IPL

Category	State	Plant Name	Generator ID	Carbon Dioxide Emissions (tons)
COALST	IA	Burlington	1	1,464,970
OGST	IA	Dubuque	3	39,786
OGST	IA	Dubuque	4	40,901
NGCC	IA	Emery Station	11	110,851
NGCC	IA	Emery Station	12	110,851
NGCC	IA	Emery Station	ST1	163,656
COALST	IA	George Neal North (**IPL Share**)	3	815,721
COALST	IA	George Neal South (**IPL Share**)	4	1,314,313
COALST	IA	Lansing	3	0
COALST	IA	Lansing	4	1,389,770
COALST	IA	Louisa (**IPL Share**)	1	236,152
COALST	IA	Milton L Kapp	2	690,518
COALST	IA	Ottumwa (**IPL Share**)	1	2,082,365
COALST	IA	Prairie Creek	3	251,076
COALST	IA	Prairie Creek	4	677,427
OGST	IA	Sutherland	1	79,570
OGST	IA	Sutherland	3	209,185
TOTAL				**9,677,112**

Year	State of Iowa CPP Mass Goals	% Reduction from 2012 Baseline	Application of % Reduction to IPL's 2012 Baseline Emissions
2012 (Baseline)	38,135,386	-	-
2022	31,713,035	-17%	8,047,397
2023	30,531,749	-20%	7,747,637
2024	28,980,270	-24%	7,353,939
2025	28,347,177	-26%	7,193,288
2026	27,661,267	-27%	7,019,233
2027	26,837,840	-30%	6,810,283
2028	26,282,731	-31%	6,669,421
2029	25,681,218	-33%	6,516,782
2030	25,018,136	-34%	6,348,521

Units at left are existing units. EGEAS assigns a "CO2A" emission rate (in addition to a "CO2" emission rate).

For the "a" series future (but not "b" or "c" series future) the EGEAS dispatch is adjusted iteratively so that total "CO2A" emissions are less than these caps. A Mass-Based Approach.

IPL 2017 IRP
Existing and Committed Units, Accredited Capacity and Dispatch Information

Resource Description	2017 Accredited Capacity (ZRCs)	2017 Full Load Heat Rate (Btu/kWh)	2017 Fuel Cost ($/MBtu)	2017 Variable O&M Cost ($/MWh)
[TRADE SECRET DATA BEGINS				
BURLINGTON				
BURLINGTON CT1				
BURLINGTON CT2				
BURLINGTON CT3				
BURLINGTON CT4				
CENTERVILLE 1				
CENTERVILLE 2				
DSM - DLC				
DSM - INTER LOAD				
EMERY CC1				
EMERY CC2				
FOX LAKE #1				
FOX LAKE #3G				
GRINNELL CT1				
GRINNELL CT2				
KAPP #2				
LANSING #4				
LIME CREEK 1				
LIME CREEK 2				
LOUISA				
MARSHALLTOWN CT1				
MARSHALLTOWN CT2				
MARSHALLTOWN CT3				
MGS CC 1 2017				
MGS CC 2 2017				
TRADE SECRET DATA ENDS]				

Resource Description	2017 Accredited Capacity (ZRCs)	2017 Full Load Heat Rate (Btu/kWh)	2017 Fuel Cost ($/MBtu)	2017 Variable O&M Cost ($/MWh)
[TRADE SECRET DATA BEGINS				
MISC AEP BIO				
MISC AEP HYDRO				
MISC AEP SOLAR				
MISC AEP WIND				
MKT EGY Off Peak				
MKT EGY On Peak				
NEAL #3				
NEAL4 25 O4				
NEXTERA DAEC				
OTTUMWA				
PRAIRIE CREEK 1				
PRAIRIE CREEK 3				
PRAIRIE CREEK 4				
RED CEDAR COGEN				
WIND ADAMS				
WIND BEAVER MINW				
WIND BINGM WINDM				
WIND BUENA STORM				
WIND CERRO HWKEY				
WIND FLYING				
WIND HANCOCK				
WIND HARDIN HILL				
WIND JCT HILLTOP				
WIND WHSP WLW				
Capacity Sale				
TRADE SECRET DATA ENDS]				

2017 Total ZRCs	**3473.6**

New, Committed or Highly Confident Near-Term Resources (2017$ listed, although resources may be added after 2017)

	(ZRCs)	(Btu/kWh)	($/MBtu)	($/MWh)	
[TRADE SECRET BEGINS					
GOLDEN CHP					4.25 MW Combined Heat and Power 5 Year PPA beginning in 2017
SOLAR DUBUQUE					IPL owned 4.7 MW (AC) solar fall 2017, 25 year life
WIND 500 MW RPU I					IPL owned 500 MW wind, 2019-2020, New Wind I
WIND FRANKLIN					99 MW wind transf to IPL ownership 2017
WIND NEW SMALL 1					Aggregate 30 MW Wind PPAs beginning in 2017, 10 year term
WIND NEW SMALL 2					Aggregate 28 MW Wind PPAs beginning in 2017, 10 year term
WIND TURTL CRK					200 MW Wind PPA beginning in 2019, 15 year term
TRADE SECRET DATA ENDS]					

IPL 2017 IRP
EGEAS Dispatch Modifiers

EGEAS Dispatch Modifiers impact dispatch order, but the modifier dollar amounts do not show up in cost reports.
The purpose of the modifiers is to recognize that the dispatching energy resources have LMP biases in the electric market.
Indicative values per 2015-2016 LMPs and MISO MTEP17 EF 2021 PROMOD modeling.
Expressed relative to IPL load zone

Dispatch modifier, $/MWh	**Neal 3**	**Neal 4**	**Emery**	**Mtown**	**Ottumwa**	**DAEC**	**Pr Creek**	**Lansing**	**Kapp**	**Louisa**	**Burlington**
[TRADE SECRET DATA BEGINS											
2017-2019											
2020											

TRADE SECRET DATA ENDS]

IPL 2017 IRP
Noteworthy Changes to Existing Units Over the Study Period

Unit	Change
Ottumwa	2019 SCR
Kapp	(Already converted to gas)
Burlington	Gas conversion 2021
Prairie Creek 1	Gas conversion 2025
Prairie Creek 3	Gas conversion 2025
Prairie Creek 4	Gas conversion 2018
Marshalltown CTs	Oil to gas conversion 2017
Flying Cloud PPA	10 year extension through 2028
DAEC PPA	Assumes no PPA extension past 12/31/2025
Marshalltown Generation Station (MGS) Combined Cycle Facility	**[TRADE SECRET DATA BEGINS** **TRADE SECRET DATA ENDS]**

IPL 2017 IRP
Major Wind Sources (PPA and Owned)

		GWH																				
Plant	**MW**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**
MISC AEP WIND	34.2	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
WIND ADAMS	5	12	12																			
WIND BEAVER MINW	3.9	11																				
WIND BINGM WINDM	15	49	49	49	49																	
WIND BUENA STORM	78.75	191	191																			
WIND CERRO HWKEY	42	101	101	101	101	101	101	101														
WIND FLYING	43.5	143	143	143	143	143	143	143	143	143	143	143	143									
WIND HANCOCK	56.76	154	154	154	154	154	154	154	154	154	154	154										
WIND HARDIN HILL	14.7	48	48	48	48	48	48	48	48	48	48											
WIND JCT HILLTOP	8	29	29	29	29	29	29	29	29	29	29											
WIND WHSP WLW	200	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660			
WIND NEW SMALL 1	30	107	107	107	107	107	107	107	107	107	107											
WIND NEW SMALL 2	28	100	100	100	100	100	100	100	100	100	100											
WIND FRANKLIN	99	293	310	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327
WIND TURTL CRK	200			804	804	804	804	804	804	804	804	804	804	804	804	804	804	804				
WIND 500 MW RPU I	500			961	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922
WIND 500 MW RPU II	500				1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922	1,922
	Total GWH	**1,971**	**1,978**	**3,556**	**6,439**	**6,390**	**6,390**	**6,390**	**6,288**	**6,288**	**6,288**	**6,004**	**5,850**	**5,707**	**5,707**	**5,707**	**5,707**	**5,707**	**4,903**	**4,243**	**4,243**	**4,243**
	Total MW	**659**	**655**	**1,021**	**1,771**	**1,756**	**1,756**	**1,756**	**1,714**	**1,714**	**1,714**	**1,633**	**1,577**	**1,533**	**1,533**	**1,533**	**1,533**	**1,533**	**1,333**	**1,133**	**1,133**	**1,133**

EGEAS Present Value Revenue Requirements ($M, 2016$, 2017-2037 study period +40 year extension period)

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		PVRR, $M			2020 Generic Wind Additions, MW		
		"a" series	"b" series	"c" series	"a" series	"b" series	"c" series
EGEAS Case #	Case Description	Dispatch of existing units modified for CO2 ramp-down	Dispatch of existing units not modified for CO2 ramp-down	Wood Mackenzie 2027 CO2 monetization	Dispatch of existing units modified for CO2 ramp-down	Dispatch of existing units not modified for CO2 ramp-down	Wood Mackenzie 2027 CO2 monetization
_001	Base Assumptions (Reference Case)	9,970.7	9,966.0	10,509.1	500	500	500
_002	High Load Forecast	10,943.0	10,933.0	11,531.1	500	500	500
_003	Low Load Forecast	9,068.7	9,067.8	9,567.1	500	500	500
_004	No Economy Energy	10,112.8	10,103.6	10,650.8	500	500	500
_007	Natural Gas Prices +30%	10,599.8	10,598.3	11,078.1	500	500	500
_006	Natural Gas Prices +20%	10,413.4	10,410.8	10,905.3	500	500	500
_005	Natural Gas Prices +10%	10,208.4	10,204.4	10,725.5	500	500	500
_008	Natural Gas Prices -10%	9,686.1	9,684.7	10,238.2	500	500	500
_009	Natural Gas Prices -20%	9,323.7	9,324.1	9,878.1	500	500	500
_010	Natural Gas Prices -30%	8,880.0	8,879.9	9,441.6	200	200	500
_013	Coal Prices +30%	10,328.8	10,329.0	10,826.0	500	500	500
_012	Coal Prices +20%	10,239.5	10,241.1	10,746.4	500	500	500
_011	Coal Prices +10%	10,124.6	10,124.3	10,649.2	500	500	500
_014	Coal Prices -10%	9,805.6	9,796.4	10,352.3	500	500	500
_015	Coal Prices -20%	9,633.9	9,620.9	10,189.4	500	500	500
_016	Coal Prices -30%	9,464.5	9,445.7	10,024.0	500	500	500
_017	New Unit Capital Costs +10%	10,208.7	10,200.6	10,793.5	500	500	500
_018	New Unit Capital Costs -10%	9,694.8	9,693.7	10,187.5	500	500	500
_020	Higher Wind Prices, +$10/MWh	10,175.6	10,159.4	10,791.4	100	0	400
_019	Higher Wind Prices, +$5/MWh	10,106.2	10,096.2	10,677.7	500	500	500
_021	Lower Wind Prices, -$5/MWh	9,795.5	9,794.5	10,297.2	500	500	500
_022	Lower Wind Prices, -$10/MWh	9,584.1	9,583.8	10,039.0	500	500	500
_024	Higher Solar Prices, +$10/MWh	10,022.1	10,016.2	10,590.8	500	500	500
_023	Higher Solar Prices, +$5/MWh	9,998.4	9,993.2	10,558.0	500	500	500
_025	Lower Solar Prices, -$5/MWh	9,920.0	9,916.8	10,451.4	500	500	500
_026	Lower Solar Prices, -$10/MWh	9,859.0	9,855.8	10,383.5	500	500	500

EGEAS Present Value Revenue Requirem

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		PVRR delta vs case _001			PVRR delta vs "a" series		
		"a" series	"b" series	"c" series	"a" series	"b" series	"c" series
EGEAS Case #	Case Description	Dispatch of existing units modified for CO2 ramp-down	Dispatch of existing units not modified for CO2 ramp-down	Wood Mackenzie 2027 CO2 monetization	Dispatch of existing units modified for CO2 ramp-down	Dispatch of existing units not modified for CO2 ramp-down	Wood Mackenzie 2027 CO2 monetization
_001	Base Assumptions (Reference Case)	-	-	-	-	(4.7)	538.4
_002	High Load Forecast	972.3	967.0	1,022.0	-	(10.0)	588.1
_003	Low Load Forecast	(902.0)	(898.2)	(942.0)	-	(0.9)	498.4
_004	No Economy Energy	142.1	137.6	141.7	-	(9.2)	538.0
_007	Natural Gas Prices +30%	629.1	632.3	569.0	-	(1.5)	478.4
_006	Natural Gas Prices +20%	442.7	444.8	396.2	-	(2.7)	491.9
_005	Natural Gas Prices +10%	237.7	238.4	216.3	-	(4.1)	517.0
_008	Natural Gas Prices -10%	(284.6)	(281.3)	(270.9)	-	(1.5)	552.0
_009	Natural Gas Prices -20%	(647.0)	(641.9)	(631.1)	-	0.5	554.4
_010	Natural Gas Prices -30%	(1,090.7)	(1,086.1)	(1,067.6)	-	(0.1)	561.6
_013	Coal Prices +30%	358.1	363.0	316.9	-	0.2	497.2
_012	Coal Prices +20%	268.8	275.1	237.3	-	1.5	506.9
_011	Coal Prices +10%	153.9	158.3	140.1	-	(0.3)	524.6
_014	Coal Prices -10%	(165.1)	(169.6)	(156.9)	-	(9.2)	546.6
_015	Coal Prices -20%	(336.8)	(345.1)	(319.8)	-	(12.9)	555.5
_016	Coal Prices -30%	(506.2)	(520.3)	(485.1)	-	(18.8)	559.5
_017	New Unit Capital Costs +10%	238.0	234.6	284.3	-	(8.1)	584.8
_018	New Unit Capital Costs -10%	(275.9)	(272.3)	(321.7)	-	(1.1)	492.7
_020	Higher Wind Prices, +$10/MWh	204.9	193.4	282.3	-	(16.2)	615.8
_019	Higher Wind Prices, +$5/MWh	135.5	130.2	168.6	-	(9.9)	571.5
_021	Lower Wind Prices, -$5/MWh	(175.2)	(171.5)	(211.9)	-	(1.0)	501.7
_022	Lower Wind Prices, -$10/MWh	(386.6)	(382.2)	(470.2)	-	(0.3)	454.9
_024	Higher Solar Prices, +$10/MWh	51.4	50.2	81.7	-	(5.9)	568.8
_023	Higher Solar Prices, +$5/MWh	27.7	27.2	48.9	-	(5.2)	559.7
_025	Lower Solar Prices, -$5/MWh	(50.7)	(49.2)	(57.8)	-	(3.2)	531.4
_026	Lower Solar Prices, -$10/MWh	(111.7)	(110.2)	(125.7)	-	(3.2)	524.5

IPL 2017 IRP **Total Additions 2017-2037**
"a" series, Dispatch of existing units modified for CO2 ramp-down

												Committed Units…							
				c30	d30	e30	f30	g30	h30	i30	j30	k30	l30	m30	n30	o30	p30	q30	r30
Case	**Description**	**PVRR, $M**	**PVRR delta from a001**	**1 yr pk pwr purch**	**CT-88**	**CT-192**	**CC-300**	**CC-605**	**Wind**	**Solar**	**Nuclear**	***MGS***	***New small wind PPAs***	***New small wind PPAs***	***New CHP PPA***	***Franklin County Wind Transfer***	***DBQ Solar***	***New Turtle Creek wind PPA***	***500 MW Wind RPU***
a001	Base Assumptions (Reference Case)	9,970.7	-	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a002	High Load Forecast	10,943.0	972.3	550	0	575.1	0	604.701	700	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a003	Low Load Forecast	9,068.7	(902.0)	200	0	575.1	0	0	700	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a004	No Economy Energy	10,112.8	142.1	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a007	Natural Gas Prices +30%	10,599.8	629.1	300	0	0	0	604.701	1100	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a006	Natural Gas Prices +20%	10,413.4	442.7	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a005	Natural Gas Prices +10%	10,208.4	237.7	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a008	Natural Gas Prices -10%	9,686.1	(284.6)	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a009	Natural Gas Prices -20%	9,323.7	(647.0)	600	0	575.1	0	604.701	500	100	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a010	Natural Gas Prices -30%	8,880.0	(1,090.7)	450	0	575.1	0	604.701	200	200	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a013	Coal Prices +30%	10,328.8	358.1	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a012	Coal Prices +20%	10,239.5	268.8	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a011	Coal Prices +10%	10,124.6	153.9	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a014	Coal Prices -10%	9,805.6	(165.1)	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a015	Coal Prices -20%	9,633.9	(336.8)	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a016	Coal Prices -30%	9,464.5	(506.2)	250	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a017	New Unit Capital Costs +10%	10,208.7	238.0	600	0	383.4	0	604.701	600	450	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a018	New Unit Capital Costs -10%	9,694.8	(275.9)	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a020	Higher Wind Prices, +$10/MWh	10,175.6	204.9	650	0	383.4	0	604.701	100	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a019	Higher Wind Prices, +$5/MWh	10,106.2	135.5	350	0	383.4	0	604.701	500	500	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a021	Lower Wind Prices, -$5/MWh	9,795.5	(175.2)	1100	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a022	Lower Wind Prices, -$10/MWh	9,584.1	(386.6)	700	0	191.7	0	604.701	1200	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a024	Higher Solar Prices, +$10/MWh	10,022.1	51.4	750	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a023	Higher Solar Prices, +$5/MWh	9,998.4	27.7	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a025	Lower Solar Prices, -$5/MWh	9,920.0	(50.7)	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
a026	Lower Solar Prices, -$10/MWh	9,859.0	(111.7)	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP **Total Additions 2017-2037**

"b" series, Dispatch of existing units not modified for CO2 ramp-down

												Committed Units…							
				c30	d30	e30	f30	g30	h30	i30	j30	k30	l30	m30	n30	o30	p30	q30	r30
Case	**Description**	**PVRR, $M**	**PVRR delta from b001**	**1 yr pk pwr purch**	**CT-88**	**CT-192**	**CC-300**	**CC-605**	**Wind**	**Solar**	**Nuclear**	***MGS***	***New small wind PPAs***	***New small wind PPAs***	***New CHP PPA***	***New Turtle Creek wind PPA***	***DBQ Solar***	***New Turtle Creek wind PPA***	***500 MW Wind RPU***
b001	Base Assumptions (Reference Case)	9,966.0	-	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b002	High Load Forecast	10,933.0	967.0	550	0	575.1	0	604.701	700	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b003	Low Load Forecast	9,067.8	(898.2)	200	0	575.1	0	0	700	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b004	No Economy Energy	10,103.6	137.6	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b007	Natural Gas Prices +30%	10,598.3	632.3	300	0	0	0	604.701	1100	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b006	Natural Gas Prices +20%	10,410.8	444.8	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b005	Natural Gas Prices +10%	10,204.4	238.4	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b008	Natural Gas Prices -10%	9,684.7	(281.3)	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b009	Natural Gas Prices -20%	9,324.1	(641.9)	500	0	575.1	0	604.701	500	100	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b010	Natural Gas Prices -30%	8,879.9	(1,086.1)	450	0	575.1	0	604.701	200	200	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b013	Coal Prices +30%	10,329.0	363.0	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b012	Coal Prices +20%	10,241.1	275.1	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b011	Coal Prices +10%	10,124.3	158.3	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b014	Coal Prices -10%	9,796.4	(169.6)	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b015	Coal Prices -20%	9,620.9	(345.1)	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b016	Coal Prices -30%	9,445.7	(520.3)	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b017	New Unit Capital Costs +10%	10,200.6	234.6	600	0	383.4	0	604.701	600	450	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b018	New Unit Capital Costs -10%	9,693.7	(272.3)	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b020	Higher Wind Prices, +$10/MWh	10,159.4	193.4	650	0	383.4	0	604.701	0	650	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b019	Higher Wind Prices, +$5/MWh	10,096.2	130.2	350	0	383.4	0	604.701	500	500	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b021	Lower Wind Prices, -$5/MWh	9,794.5	(171.5)	1100	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b022	Lower Wind Prices, -$10/MWh	9,583.8	(382.2)	700	0	191.7	0	604.701	1200	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b024	Higher Solar Prices, +$10/MWh	10,016.2	50.2	750	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b023	Higher Solar Prices, +$5/MWh	9,993.2	27.2	750	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b025	Lower Solar Prices, -$5/MWh	9,916.8	(49.2)	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*
b026	Lower Solar Prices, -$10/MWh	9,855.8	(110.2)	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP	Total Additions 2017-2037											Committed Units...							
	"c" series, Wood Mackenzie 2027 CO2 monetization			c30	d30	e30	f30	g30	h30	i30	j30	k30	l30	m30	n30	o30	p30	q30	r30
Case	Description	PVRR, $M	PVRR delta from c001	1 yr pk pwr purch	CT-88	CT-192	CC-300	CC-605	Wind	Solar	Nuclear	MGS	New small wind PPAs	New small wind PPAs	New CHP PPA	New Turtle Creek wind PPA	DBQ Solar	New Turtle Creek wind PPA	500 MW Wind RPU
c001	Base Assumptions (Reference Case)	10,509.1	-	750	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c002	High Load Forecast	11,531.1	1,022.0	450	0	383.4	0	604.701	1200	900	0	646	30	28	4.25	99	4.7	200	500
c003	Low Load Forecast	9,567.1	(942.0)	200	0	575.1	0	0	900	550	0	646	30	28	4.25	99	4.7	200	500
c004	No Economy Energy	10,650.8	141.7	600	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c007	Natural Gas Prices +30%	11,078.1	569.0	200	0	0	0	604.701	1400	900	0	646	30	28	4.25	99	4.7	200	500
c006	Natural Gas Prices +20%	10,905.3	396.2	200	0	0	0	604.701	1400	900	0	646	30	28	4.25	99	4.7	200	500
c005	Natural Gas Prices +10%	10,725.5	216.3	200	0	0	0	604.701	1400	900	0	646	30	28	4.25	99	4.7	200	500
c008	Natural Gas Prices -10%	10,238.2	(270.9)	700	0	191.7	0	604.701	800	750	0	646	30	28	4.25	99	4.7	200	500
c009	Natural Gas Prices -20%	9,878.1	(631.1)	400	0	383.4	0	604.701	700	400	0	646	30	28	4.25	99	4.7	200	500
c010	Natural Gas Prices -30%	9,441.6	(1,067.6)	350	0	383.4	0	604.701	500	500	0	646	30	28	4.25	99	4.7	200	500
c013	Coal Prices +30%	10,826.0	316.9	750	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c012	Coal Prices +20%	10,746.4	237.3	750	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c011	Coal Prices +10%	10,649.2	140.1	750	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c014	Coal Prices -10%	10,352.3	(156.9)	750	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c015	Coal Prices -20%	10,189.4	(319.8)	700	0	191.7	0	604.701	800	750	0	646	30	28	4.25	99	4.7	200	500
c016	Coal Prices -30%	10,024.0	(485.1)	700	0	191.7	0	604.701	800	750	0	646	30	28	4.25	99	4.7	200	500
c017	New Unit Capital Costs +10%	10,793.5	284.3	700	0	191.7	0	604.701	800	750	0	646	30	28	4.25	99	4.7	200	500
c018	New Unit Capital Costs -10%	10,187.5	(321.7)	50	0	0	0	604.701	1400	900	0	646	30	28	4.25	99	4.7	200	500
c020	Higher Wind Prices, +$10/MWh	10,791.4	282.3	1100	0	191.7	0	604.701	400	850	0	646	30	28	4.25	99	4.7	200	500
c019	Higher Wind Prices, +$5/MWh	10,677.7	168.6	1050	0	191.7	0	604.701	600	800	0	646	30	28	4.25	99	4.7	200	500
c021	Lower Wind Prices, -$5/MWh	10,297.2	(211.9)	200	0	575.1	0	0	1500	850	0	646	30	28	4.25	99	4.7	200	500
c022	Lower Wind Prices, -$10/MWh	10,039.0	(470.2)	150	0	575.1	0	0	1500	850	0	646	30	28	4.25	99	4.7	200	500
c024	Higher Solar Prices, +$10/MWh	10,590.8	81.7	600	0	383.4	0	604.701	900	350	0	646	30	28	4.25	99	4.7	200	500
c023	Higher Solar Prices, +$5/MWh	10,558.0	48.9	1100	0	191.7	0	604.701	900	700	0	646	30	28	4.25	99	4.7	200	500
c025	Lower Solar Prices, -$5/MWh	10,451.4	(57.8)	300	0	0	0	604.701	1100	900	0	646	30	28	4.25	99	4.7	200	500
c026	Lower Solar Prices, -$10/MWh	10,383.5	(125.7)	300	0	0	0	604.701	1100	900	0	646	30	28	4.25	99	4.7	200	500

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a001 Base Assumptions (Reference Case)

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a002 High Load Forecast

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	550	0	575.1	0	604.701	700	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a003 Low Load Forecast

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	150	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	383.4	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	575.1	0	0	700	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a004 No Economy Energy

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a007 Natural Gas Prices +30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	300	0	0	0	604.701	1100	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a006 Natural Gas Prices +20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a005 Natural Gas Prices +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a008 Natural Gas Prices -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a009 Natural Gas Prices -20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	600	0	575.1	0	604.701	500	100	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a010 Natural Gas Prices -30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	450	0	575.1	0	604.701	200	200	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a013 Coal Prices +30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a012 Coal Prices +20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a011 Coal Prices +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a014 Coal Prices -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a015 Coal Prices -20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a016 Coal Prices -30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	250	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a017 New Unit Capital Costs +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	100	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	600	0	383.4	0	604.701	600	450	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a018 New Unit Capital Costs -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a020 Higher Wind Prices, +$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	100	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	650	0	383.4	0	604.701	100	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a019 Higher Wind Prices, +$5/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	350	0	383.4	0	604.701	500	500	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a021 Lower Wind Prices, -$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	1100	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a022 Lower Wind Prices, -$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	1200	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a024 Higher Solar Prices, +$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a023 Higher Solar Prices, +$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a025 Lower Solar Prices, -$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units modified for CO2 ramp-down
Case: a026 Lower Solar Prices, -$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b001 Base Assumptions (Reference Case)

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b002 High Load Forecast

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	550	0	575.1	0	604.701	700	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b003 Low Load Forecast

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	150	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	383.4	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	575.1	0	0	700	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b004 No Economy Energy

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b007 Natural Gas Prices +30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	300	0	0	0	604.701	1100	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b006 Natural Gas Prices +20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b005 Natural Gas Prices +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b008 Natural Gas Prices -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b009 Natural Gas Prices -20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	500	0	575.1	0	604.701	500	100	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b010 Natural Gas Prices -30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	450	0	575.1	0	604.701	200	200	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b013 Coal Prices +30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b012 Coal Prices +20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b011 Coal Prices +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b014 Coal Prices -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b015 Coal Prices -20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b016 Coal Prices -30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b017 New Unit Capital Costs +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	100	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	600	0	383.4	0	604.701	600	450	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b018 New Unit Capital Costs -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b020 Higher Wind Prices, +$10/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	650	0	383.4	0	604.701	0	650	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b019 Higher Wind Prices, +$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	350	0	383.4	0	604.701	500	500	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b021 Lower Wind Prices, -$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	1100	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b022 Lower Wind Prices, -$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	1200	600	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b024 Higher Solar Prices, +$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b023 Higher Solar Prices, +$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b025 Lower Solar Prices, -$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Dispatch of existing units not modified for CO2 ramp-down
Case: b026 Lower Solar Prices, -$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	650	0	191.7	0	604.701	700	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c001 Base Assumptions (Reference Case)

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c002 High Load Forecast

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	450	0	383.4	0	604.701	1200	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c003 Low Load Forecast

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	150	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	383.4	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	575.1	0	0	900	550	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c004 No Economy Energy

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	600	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c007 Natural Gas Prices +30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	0	0	604.701	1400	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c006 Natural Gas Prices +20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	0	0	604.701	1400	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c005 Natural Gas Prices +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	0	0	604.701	1400	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c008 Natural Gas Prices -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c009 Natural Gas Prices -20%

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units…* *MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	400	0	383.4	0	604.701	700	400	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c010 Natural Gas Prices -30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	350	0	383.4	0	604.701	500	500	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c013 Coal Prices +30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c012 Coal Prices +20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c011 Coal Prices +10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c014 Coal Prices -10%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	750	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c015 Coal Prices -20%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c016 Coal Prices -30%

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c017 New Unit Capital Costs +10%

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	700	0	191.7	0	604.701	800	750	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c018 New Unit Capital Costs -10%

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	50	0	0	0	604.701	1400	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c020 Higher Wind Prices, +$10/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	400	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	1100	0	191.7	0	604.701	400	850	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c019 Higher Wind Prices, +$5/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	1050	0	191.7	0	604.701	600	800	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c021 Lower Wind Prices, -$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	383.4	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	100	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	50	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	200	0	575.1	0	0	1500	850	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c022 Lower Wind Prices, -$10/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	0	0	0	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	383.4	0	0	100	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	100	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	150	0	575.1	0	0	1500	850	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c024 Higher Solar Prices, +$10/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	191.7	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	50	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	0	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	600	0	383.4	0	604.701	900	350	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c023 Higher Solar Prices, +$5/MWh

									Committed units…							
YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	100	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	150	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	50	0	191.7	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	1100	0	191.7	0	604.701	900	700	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c025 Lower Solar Prices, -$5/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	300	0	0	0	604.701	1100	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

IPL 2017 IRP
MW

Scenario: Wood Mackenzie 2027 CO2 monetization
Case: c026 Lower Solar Prices, -$10/MWh

YEAR	1 yr pk pwr purch 1	CT-88 2	CT-192 3	CC-300 4	CC-605 5	Wind 6	Solar 7	Nuclear 8	*Committed units… MGS*	*New small wind PPAs*	*New small wind PPAs*	*New CHP PPA*	*Franklin County Wind Transfer*	*DBQ Solar*	*New Turtle Creek wind PPA*	*500 MW Wind RPU*
2017	0	0	0	0	0	0	0	0	*646*	*30*	*28*	*4.25*	*99*	*0*	*0*	*0*
2018	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*4.7*	*0*	*0*
2019	0	0	0	0	0	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*	*200*	*250*
2020	0	0	0	0	0	500	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*250*
2021	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2022	0	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2023	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2024	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2025	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2026	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2027	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2028	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2029	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2030	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2031	0	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2032	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2033	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2034	50	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2035	0	0	0	0	604.701	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2036	100	0	0	0	0	0	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2037	50	0	0	0	0	200	50	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL	300	0	0	0	604.701	1100	900	0	*646*	*30*	*28*	*4.25*	*99*	*4.7*	*200*	*500*

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