FILED
February 12, 2021
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF VERIFIED **INDIANAPOLIS** POWER & LIGHT COMPANY ("IPL") FOR (1) ISSUANCE TO IPL OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE ACOUISITION AND DEVELOPMENT BY A WHOLLY-OWNED IPL SUBSIDIARY OF A **IURC** SOLAR POWER GENERATING FACILITY TO PETITIONER'S BE KNOWN AS HARDY HILLS SOLAR ("THE HARDY HILLS PROJECT"); (2) APPROVAL OF THE HARDY HILLS PROJECT, INCLUDING A JOINT VENTURE STRUCTURE BETWEEN AN IPL SUBSIDIARY AND ONE OR MORE TAX EQUITY PARTNERS AND A CONTRACT FOR DIFFERENCES BETWEEN IPL AND PROJECT COMPANY THAT HOLDS AND OPERATES THE SOLAR GENERATION ASSETS. **CAUSE NO. 45493** CLEAN ENERGY **PROJECT** ASSOCIATED TIMELY **COST** RECOVERY UNDER IND. CODE § 8-1-8.8-11; (3) APPROVAL OF ACCOUNTING AND RATEMAKING FOR THE HARDY HILLS PROJECT, INCLUDING AN ALTERNATIVE REGULATORY PLAN UNDER IND. CODE § 8-1-2.5-6 TO FACILITATE IPL'S INVESTMENT IN THE HARDY HILLS PROJECT THROUGH A JOINT VENTURE; AND (4) TO THE EXTENT NECESSARY, ISSUANCE OF AN ORDER PURSUANT TO IND. CODE § 8-1-2.5-5 DECLINING TO EXERCISE JURISDICTION OVER THE JOINT VENTURE, INCLUDING THE PROJECT COMPANY, AS A PUBLIC UTILITY.

PETITIONER'S SUBMISSION OF DIRECT TESTIMONY OF <u>KRISTINA LUND</u>

Indianapolis Power & Light Company ("IPL" or "Petitioner"), by counsel, hereby submits the direct testimony and attachment of Kristina Lund.

Respectfully submitted,

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Indianapolis Power & Light Company

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing was served this 12th day of February, 2021, by electronic transmission or United States Mail, first class, postage prepaid on:

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ATTORNEYS FOR PETITIONER

INDIANAPOLIS POWER & LIGHT COMPANY

VERIFIED DIRECT TESTIMONY

OF

KRISTINA LUND

ON BEHALF OF

INDIANAPOLIS POWER & LIGHT COMPANY

SPONSORING IPL ATTACHMENT KL-1

VERIFIED DIRECT TESTIMONY OF KRISTINA LUND ON BEHALF OF INDIANAPOLIS POWER & LIGHT COMPANY

1		1. <u>INTRODUCTION</u>
2	Q1.	Please state your name, employer, and business address.
3	A1.	My name is Kristina Lund. I am employed by AES US Services, LLC ("AES Services").
4		My business address is One Monument Circle, Indianapolis, Indiana 46204.
5	Q2.	What is your position with IPL?
6	A2.	I am President and CEO of AES US Utilities. In that role, I serve as President and Chief
7		Executive Officer of: the Indianapolis Power & Light Company ("IPL" or "the
8		"Company"); IPL's parent company, IPALCO Enterprises, Inc. ("IPALCO"); IPALCO's
9		parent company, AES U.S. Investments; The Dayton Power and Light Company
10		("DP&L"); and of DP&L's parent company, DPL, Inc.
11	Q3.	On whose behalf are you submitting this direct testimony?
12	A3.	I am submitting this testimony on behalf of Indianapolis Power & Light Company.
13	Q4.	Please describe your duties as the President and Chief Executive Officer ("CEO"),
14		AES US Utilities, which includes IPL.
15	A4.	As the President and Chief Executive Officer of IPL, I lead the team responsible for
16		ensuring that the Company's customers have access to safe, reliable, and economic electric
17		service. I also engage in external efforts relating to governmental and regulatory affairs
18		and interact with state and community leaders and other stakeholders on matters relevant
19		to IPL's business in Indiana. My responsibilities include managing and directing the
20		following departments of IPL: transmission and distribution operations, power generation

- 1 operations, construction, regulatory, legal, finance, human resources, customer operations,
- 2 commercial and public relations.
- 3 Q5. Please summarize your education and professional qualifications.
- 4 A5. I have a bachelor's degree in Economics from Wellesley College and a Master's in
- 5 Business Administration from Harvard Business School.
- 6 Q6. Please summarize your prior work experience.
- 7 A6. I have more than 14 years of experience with the AES Corporation. I assumed the role of 8 President, US Utilities, in October 2020. Prior to this role, I developed innovative 9 renewable energy products as Chief Product Officer, Carbon Free Energy, for AES. From 10 2018 to 2020, I was Chief Financial Officer ("CFO") of the Mexico, Central America, and 1 I Caribbean ("MCAC") business unit of AES where I was responsible for leading and 12 managing all financial matters for the MCAC business unit. From 2017 to 2018, I was the 13 CFO of AES's Eurasia business unit, covering AES's operations in eight countries from 14 Vietnam to the United Kingdom. Previously, I served as the Vice President of the AES 15 Corporate Strategy and Investment group. In this role, I facilitated AES's Investment 16 Committee, which sets the Company's strategy and approves investments into AES's 17 growth projects around the world. I have held positions in several groups in AES's finance 18 organization, including mergers and acquisitions, financial planning and analysis, and 19 investor relations.
- Q7. Have you testified previously before the Indiana Utility Regulatory Commission

 ("Commission") or any other regulatory agency?

- 1 A7. I have not testified before this Commission. In 2019, I filed direct testimony on behalf of
- 2 intervenor AES Puerto Rico, L. P. in Case No. CEPR-AP-2018-0001 before the
- 3 Commonwealth of Puerto Rico Public Service Regulatory Board Puerto Rico Energy
- Bureau. Additionally, in 2020, I filed direct testimony on behalf of DP&L in Case
- No.20-1651-EL-AIR before the Public Utilities Commission of Ohio.
- 6 Q8. Were you involved with the Company's decision to invest in the Hardy Hills Project?
- 7 A8. Yes, I was a part of the team the made the decision to invest in Hardy Hills Solar ("Hardy
- 8 Hills Project", "Hardy Hills" or "Project").
- 9 Q9. What is the purpose of your testimony in this proceeding?
- 10 A9. My testimony provides an overview of the relief sought by IPL in this proceeding, and
- discusses the importance of a timely decision. To provide context, I describe the Company
- and our ongoing work to meet our customers' ongoing need for reliable service through
- further diversification of our generation and use of renewable energy. I discuss how the
- 14 Company will manage the proposed Hardy Hills Project and support the Company's
- request for ongoing review. I discuss the Project benefits and present my view as to why
- 16 Commission approval of the Project serves the public convenience and necessity. To
- facilitate review of the Company's filing, I identify the other witnesses who testify in
- support of the pending request.
- 19 Q10. Are you familiar with the Petition in this proceeding and the relief that it seeks?
- 20 A10. Yes.
- 21 Q11. Are you sponsoring any attachments?
- 22 All. Yes, I am sponsoring IPL Attachment KL-1 Verified Petition.

1	Q12.	Was this attachment prepared or assembled by you or under direction and
2		supervision?
3	A12.	Yes.
4 5		2. IPL COMMITMENT TO CLEAN, RELIABLE AND LOW COST ENERGY SERVICE
6	Q13.	Please provide an overview of IPL's ongoing effort to meet the need for electric
7		service in IPL's service territory.
8	A13.	IPL strives to deliver safe, reliable, and affordable electric service and facilities to
9		customers in the City of Indianapolis and surrounding central Indiana communities. The
10		Company's history of comparatively low rates and solid service performance scores
11		illustrates the Company's long standing commitment to this objective. IPL also strives to
12		respond to customers' ever changing needs and to ongoing technological change.
13		The Petition in this proceeding stems from the Company's 2019 Integrated Resource Plan
14		("IRP"), the planning tool used by the Company to determine how to meet the ongoing
15		need for reliable and economic electricity in the Company's service area. This IRP was
16		developed in an environment with expectations for unprecedented technological change
17		and power market evolution over the planning horizon.
18		While the Company continues to operate its existing thermal generation to the extent it
19		makes economic sense for customers, we also recognize the evolving role of renewable
20		generation in meeting the need for electricity in our service area.
21		Changing customer preferences and expectations, a changing regional resource mix, and
22		the growing importance of carbon reduction have all played into IPL's IRP and the
23		resulting Preferred Resource Portfolio. The proposed Project which is the subject of this

PUBLIC VERSION

1	proceeding will develop an Indiana solar generating facility and will further diversify the
2	Company's generation portfolio, which is beneficial as discussed below. This Project is
3	an important step toward implementing the 2019 IRP Preferred Resource Portfolio Short
4	Term Action Plan

3. OVERVIEW OF PROJECT

Q14. Please identify the Project which is the subject of the Petition.

A14.

As further discussed by IPL Witness Cooper, the Petition is addressed to the development of a proposed solar power electric generating facility to be known as Hardy Hills Solar. The Hardy Hills Project is located in Clinton County, Indiana. Hardy Hills will contribute 195 MWac of installed capacity ("ICAP") and 97.5 MW of unforced capacity ("UCAP"). The facility is expected to become commercially operable in second quarter 2023. Invenergy Solar Project Development North American LLC ("Invenergy") is the project developer. As discussed by IPL Witnesses Cooper and Salatto, a Joint Venture structure with a tax equity partner will be used to reduce the overall cost of the Project for the benefit of IPL's customers. The best estimate of the total cost of IPL's investment in this Project, including project interconnection cost and network upgrades and tax equity contribution, is \$\frac{1}{2} \frac{1}{2} \frac{1

4. OVERVIEW OF RELIEF SOUGHT

19 Q15. Please summarize the relief sought in this proceeding.

A15. IPL requests the Commission to issue a certificate of public convenience and necessity ("CPCN") for the acquisition and development of Hardy Hills through the transaction

¹ IPL Witness Cooper Direct Testimony at Q/A 52.

1		described in IPL's testimony; to find the Hardy Hills Project is a reasonable and necessary
2		Clean Energy Project; and to encourage the development of the Project by authorizing the
3		recovery of costs and associated accounting treatment, as explained by IPL Witness
4		Rogers.
5		5. <u>CLEAN ENERGY PROJECT</u>
6	Q16.	Is Hardy Hills a "Clean Energy Project" as that term is defined in Ind. Code ch 8-1-
7		8.8?
8	A16.	Yes. A "Clean Energy Project" as defined in the statute includes renewable energy
9		resources. ² Solar energy is specifically listed as a clean energy resource, making the Hardy
10		Hills Project a renewable energy resource and a resource this statute was designed to
11		encourage. ³
12	Q17.	Please explain.
13	A17.	The legislature's statement of its intent for this statute includes the following legislative
14		findings and purpose:
115 116 117 118 119 220 221 222 223 224 225 226		 The development of a robust and diverse portfolio of energy production or generating capacity, including coal gasification and the use of renewable energy resources, is needed if Indiana is to continue to be successful in attracting new businesses and jobs.⁴ It is in the public interest for the state to encourage the construction of new energy production or generating facilities that increase the in-state capacity to provide for current and anticipated energy demand at a competitive price.⁵ The purpose of this chapter is to enhance Indiana's energy security and
25 26		reliability by ensuring all of the following:

² Ind. Code § 8-1-8.8-2, -10.

³ Ind. Code § 8-1-37-4(a)(2). ⁴ Ind. Code § 8-1-8.8-1(a)(2). ⁵ Ind. Code § 8-1-8.8-1(a)(6).

PUBLIC VERSION

1 2 3 4 5 6 7 8 9 10	continues to be adequate to provide for Indiana's current and future nergy needs, including the support of the state's economic development efforts (3) the electric transmission and gas transportation systems within In are upgraded to distribute additional amounts of electricity and gas more efficiently 6 The Hardy Hills Project falls within these considerations. This Project is the ty Indiana-based renewable energy generation construction the legislature encountries.							
13	Q18.	Is IPL an eligible business under Chapter 8.8?						
14	A18.	Yes. IPL is an energy utility. Through both the proposed acquisition and project						
15		development agreement with the Hardy Hills developer, and the proposed Joint Venture,						
16		IPL is proposing to undertake a project to develop a renewable energy project – namely a						
17		solar energy project. Therefore, the Company is eligible for relief under Chapter 8.8.						
18		6. <u>TIMELINE</u>						
19	Q19.	Is a timely decision important?						
20	A19.	Yes. IPL asks the Commission to issue a decision not later than 120 days after the date of						
21		the filing of the Joint Petition. This will allow time for the Commission's decision to						
22		become final and the proceeding to close by the Approval Deadline (
23		in the Membership Interest Purchase, Project Development and Construction Management						
24		Agreement ("MIPA") for Hardy Hills. ⁷						

⁶ Ind. Code § 8-1-8.8-1(b).

⁷ MIPA, Exhibit A (Definitions) at p. A-2. While the MIPA allows either party to request the other party to agree to an extension of the Approval Deadline, there is no assurance that the other party will agree to an extension and any such extension would entitle Seller to a Change Order to the Contract Price and other MIPA provisions. See MIPA at Sections 3.7 and 7.1(b).

PUBLIC VERSION

1		A timely decision is reasonable and necessary to allow the project to be built and
2		commercially operable to allow the new resource to be interconnected to MISO and
3		identified as a capacity resource by the 2023-2024 MISO Planning Year. In order to
4		achieve this goal, Mechanical Completion is scheduled for in order to
5		commission the facility and undertake testing for the MISO Planning year and Substantial
6		Completion is scheduled to be achieved by the start of the MISO
7		planning year on June 1, 2023.8
8		7. IPL'S PROVISION OF SERVICE TO CUSTOMERS
9	Q20.	Please describe IPL's service area and customer base.
10	A20.	IPL provides retail electric utility service to more than 500,000 retail customers located
11		principally in and near the economically important State capital – the City of Indianapolis,
12		Indiana, and in portions of the following Indiana counties: Boone, Hamilton, Hancock,
13		Hendricks, Johnson, Marion, Morgan, Owen, Putnam and Shelby Counties.

territory. This location is advantageous from an operational and economic development

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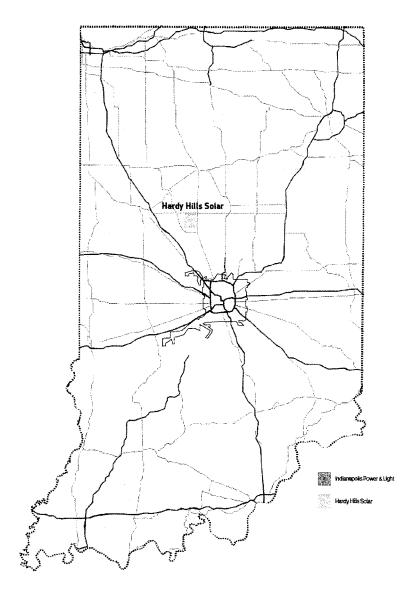
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⁸ MIPA at Exhibit B.

perspective.

Figure 1. Hardy Hills Map



Q21. How does IPL meet its customers' need for electricity?

A21. IPL meets its customers' need for electricity through a combination of: (a) existing generation; (b) wholesale market purchases; (c) wind energy procured under power purchase agreements; (d) load management and distributed generation (solar resources); and (e) conservation, including demand-side management and energy efficiency. The resource mix has evolved over time as plants retire due to age, environmental regulation,

1	technological	change,	and	economic	conditions,	and	as	customer	interests	and	peak
2	demand chang	ges over t	ime.								

IPL's existing portfolio of generating assets provides the bulk of the supply necessary to meet customer demands. As plants are retired and customer peak demand grows over time, the need for new resources grows. As discussed by IPL Witness Miller, like other utilities, IPL uses an integrated resource planning process to determine the optimal mix of supply or demand resources to provide electricity to our customers. This portfolio approach focuses on the deployment of an economic and reliable combination of resources and on the reduction of risk through diversification.

The IRP is affected by many factors, such as environmental regulations, the economy, and the economics of new technologies and fuel supply. As a result, the IRP is re-examined as circumstances change. The evaluation of scenarios and sensitivities in the IRP permits IPL management to exercise judgment in selecting options consistent with reasonable least cost planning to serve our customers. These matters are further discussed by IPL Witness Miller.

Q22. Please provide an overview of IPL's existing generating units and other sources of supply.

A22. As discussed in the 2019 IRP, IPL's resource portfolio has changed dramatically over the last several years. Coal made up 79% of the IPL fleet in 2007, but by 2018 coal represented 43% of the nameplate capacity. Through the resource planning process, IPL has sought to find a reasonable least cost solution to meet the needs of its customers. Prudent portfolio

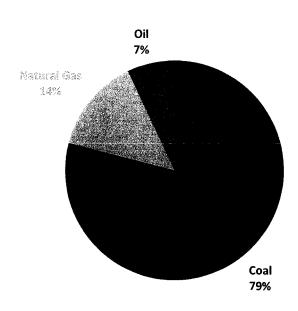
⁹ 2019 IRP Volume 1 at p. 58.

1 management suggests that diversity of resource options helps to mitigate cost volatility. In

2020, the Company's resources are as shown in Figure 2.

Figure 2. IPL's Resource Mix

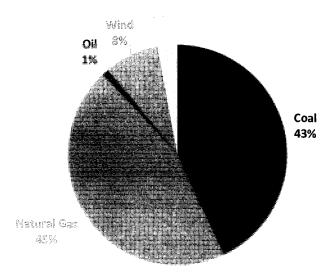
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The Company-owned generation capacity is located at the following primary sites: (a) Petersburg Station (Petersburg, IN); (b) Harding Street and Georgetown Stations (Indianapolis, IN); and (c) Eagle Valley Station (Martinsville, IN). IPL has about 300 MW of wind generation (ICAP) secured under long term Power Purchase Agreements ("PPA") approved by the Commission.¹⁰ In addition to this wind energy, IPL has contracted to purchase about 96 MW of energy from solar facilities located throughout its service territory pursuant to its Rate REP.11 IPL also uses demand-side management to meet the need for electricity within its service area. All of these resources are discussed in IPL's most recent IRP, a copy of which is included as an attachment to IPL Witness Miller's testimony.

Q23. Please discuss the Company's anticipated resource mix upon implementation of the 2019 IRP Short Term Action Plan.

A23. Upon implementation of the Short Term Action Plan based on the updated 2019 IRP analysis and RFP evaluation, the Company's anticipated resource mix in 2023 will be as shown in Figure 3.

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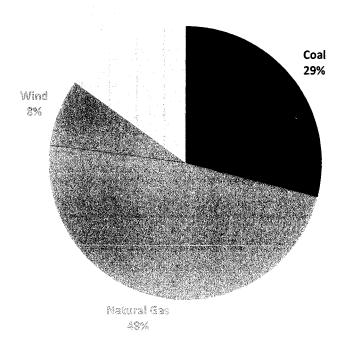
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¹⁰ *Id.* at p. 62. ¹¹ *Id.*

Figure 3: IPL's 2023 Projected Resource Mix



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The transition reflected in the 2019 IRP Short Term Action Plan preserves flexibility and optionality. The 2019 IRP Short Term Action Plan retires units where the continued operation of the units is not economically prudent. Further, a more diverse, scalable, and balanced fleet helps protect against fuel price swings and capacity factor variances of different generation sources. Put another way, diverse fleets optimize the customer position in varying economic and political scenarios.¹²

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8. PROJECT BENEFITS

- Q24. Is the Company's proposed investment in the Hardy Hills Project beneficial?
- 11 A24. Yes. The Project has many benefits including those set forth below.
 - 1) Economic benefits to customers. IPL's IRP compared the cost of electricity generated by

¹² See IPL All-Source RFP at p. 2.

then identified the preferred portfolio to serve customer needs at the lowest cost. As discussed by IPL Witnesses Miller and Cooper, the Hardy Hills Project acquisition is consistent with the preferred portfolio from the IRP that is expected to result in lower costs for our customers well into the future. IPL's updated 2019 IRP analysis shows the Company requires approximately 250 MW (UCAP) of additional capacity starting in 2023 to meet the need for electricity in our service area. As discussed by IPL Witness Cooper, a competitive all-source bidding process was used to solicit and evaluate potential resources to fill IPL's need for capacity starting in 2023. IPL has reasonably considered and evaluated other resource options for providing reliable, efficient, and economic service.

- 2) Economic development benefits in Indiana. Renewable energy is increasingly a requirement for cities and states to attract new investment and jobs. In fact, many large companies "screen" potential locations for new investment for the availability of economic renewable energy. By increasing the availability of renewable energy, Indianapolis will have a stronger competitive advantage in attracting new investment and creating new jobs.
- 3) Environmental benefits. Solar energy provides a carbon free, zero air emissions source of electricity, as there are not any greenhouse gas, nitrious oxide or sulfur dioxide emissions from each megawatt hour of electricity generated. In other words, solar energy is a clean and sustainable resource. The development of this resource benefits the environment and is consistent with current and potential customers' interest in solar energy as a generating resource.
- 4) Benefits from lower risk due to diversification. As shown in Figures 1 and 2 above, the

addition of this resource will further diversify the Company's generation portfolio. The addition of this Project to IPL's resource portfolio will further the Company's efforts to protect our customers from fuel price fluctuations, and changes in regulatory practices that can drive up the cost of a particular fuel (e.g., environmental regulations).

- 5) Local investment economic benefits. Hardy Hills will be a "home grown" energy resource. IPL's development of an economic "home grown" resource is consistent with the state policy, which, as discussed above, encourages Indiana located generation for various reasons, including energy security and economic development. The Project offers the traditional economic benefits of local Indiana business investment, revenue generation, and job creation.
- 6) Benefits from interconnection to MISO. While the Company has a total of 96 MW (ICAP) of distributed solar resources under contract, each of these customer sited facilities is comparatively small and does not participate in the MISO wholesale market, as each is interconnected behind the meter to the IPL distribution system. The Hardy Hills Project will provide 195 MWac of ICAP and will participate in the MISO wholesale market, as it will interconnect to the broader transmission system. The size of the Hardy Hills Project (97.5 MW UCAP) is reasonable and provides flexibility in meeting IPL's 2023 UCAP need. 13
- 7) Tax benefits. The Hardy Hills Project is eligible for the 30% federal investment tax credit.

 The tax equity partner structure proposed for this investment allows the Company to maximize the tax benefits and reduce the new generation costs for the benefit of our

¹³ IPL Witness Cooper Direct Testimony at O/As 29-30.

1 customers.¹⁴ The overall transaction is structured to enable IPL to exercise oversight while 2 the facility is being built and to manage its operation and maintenance once the new Project 3 becomes commercially operable.

- 8) Renewable energy certificate benefits. The Hardy Hills Project will produce renewable energy certificates ("RECs"), which IPL will control and use for the benefit of our customers as discussed by IPL Witness Cooper.¹⁵
- 9) Reliability and operational benefits from integrating diversified generation technologies. The new solar capacity will support the system's ability to meet summer peak loads and will contribute to IPL's MISO capacity obligations. For example, the Hardy Hills Project and the Company's Eagle Valley combined cycle gas turbine ("CCGT") plant are complementary of each other in that the CCGT can be dispatched with flexibility to correspond with output from a solar project.
- 10) Asset performance and reliability benefits from emerging digital technologies. AES, the parent company of IPL, has global experience in applying digital technologies to improve generation asset performance from digital tools, for example using advanced analytics and Artificial Intelligence models for early detection of operational conditions. The Hardy Hills Project is expected to be operated using these tools to drive efficiency and reliability from the plant and maintain the solar facility at the lowest reasonable cost. In addition, the IPL portfolio performance, including the Hardy Hills investment, will benefit from the insights, standards and analytics collected across AES' global portfolio of diversified generation assets. AES currently owns and operates more than 31 GW of generation

¹⁴ See IPL Witness Salatto Direct Testimony.

¹⁵ IPL Witness Cooper Direct Testimony at Section 8.

1	capacity globally	, including more than	10 GW of renewables.	defined as solar,	wind, hydro.

2 energy storage, biomass, and landfill gas capacity. Insights from the global portfolio will

3 be applied in Indiana to benefit IPL customers.

4 Q25. You stated above that the Company's proposed investment in the Hardy Hills Project

5 is consistent with the expectation of customers. Please explain.

6 A25. The City of Indianapolis has encouraged IPL to increase its implementation of clean

7 renewable energy, energy efficiency and energy storage. Indianapolis' Thrive Plan

approved in 2019, establishes a goal that 20% of energy consumed in Indianapolis comes

from renewable sources by 2025 and of 100% percent renewable energy use by 2050. 16

Many of the Company's customers have expressed an interest in increased use of clean and

sustainable energy as well as diversification of resources. Public comments presented by

the Office of Utility Consumer Counselor ("OUCC") in IPL's most recent rate case (IURC

Cause No. 45029) show support for cleaner energy. Some examples of how the support

was articulated is as follows:17

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• "IPL also should begin to phase out Petersburg and move Indianapolis towards

100% renewable energy."

• "Focus efforts on renewable energy resources, like solar and wind."

• "I ask you to move to 100% clean energy..."

Corporations and universities operating in the Company's service area have also publicly

¹⁶ 2019 Indianapolis Thrive Plan

¹⁷ See IURC Cause No. 45029, Public's Ex. 14 (Attachment AFS-1 to OUCC Witness Swinger Direct Testimony).

announced their support for cleaner resources. 18 19 20 21

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Renewable energy investment is also important to economic development. Local tourism and sports groups, such as Visit Indy, Indiana Sports Corp., and the NCAA, regularly reach out to IPL for assistance when they are looking to attract major conventions and sporting events that are sponsored by organizations that are concerned about the environmental impact of their events. IPL also works with the Indianapolis Chamber of Commerce and Indiana Economic Development Corporation to help attract businesses and industries that make social and environmental sustainability goals part of their relocation or expansion plans. Increasing IPL's green generation capacity will help make Indianapolis even more attractive to environmentally conscious sponsors and businesses. Safe, reliable, affordable and sustainable energy can be a competitive advantage for Indianapolis and Indiana in attracting new investment. In addition, maintaining and growing the business community is beneficial because it provides a larger base over which to spread the fixed costs of providing retail electric service. While the Company strives to control the cost of providing service, it is important to maintain and grow load as a means of keeping our rates reasonably low and competitive. Retaining and attracting new customers, who are increasingly interested in being served by green energy resources, is

Q26. Are you aware of Indiana's 21st Century Energy Policy Development Task Force?

an important part of our effort to keep rates comparatively low.

¹⁸ 2019 Eli Lilly & Co. Integrated Summary Report.

¹⁹ https://www.roche.com/sustainability/fighting-climate-change.htm

²⁰ https://www.rolls-royce.com/sustainability/approach/climate-change.aspx#section-targets-and-metrics

²¹https://facultycouncil.iupui.edu/FCContent/Html/Media/FCContent/PDF/2020-

¹⁰ IUPUISustainabilityResolution.pdf

A26. Yes, I am generally aware of it. My understanding is that the Task Force was formed in 2019 to explore the impact that fuel transitions and emerging technologies may have on the state's electric system. ²² The Task Force issued a report on November 19, 2020 setting forth recommendations for the Indiana General Assembly and the Governor. The transition plan reflected in IPL's 2019 IRP Preferred Resource Portfolio is consistent with the findings in the report, which among other things, recognizes that economic renewable energy projects, like the Hardy Hills Project, are a reasonable and necessary part of the State energy policy. In pertinent part, the report finds:

- that to keep Indiana competitive in attracting and retaining certain businesses,
 the state must encourage the deployment of renewable energy resources, while
 not compromising the reliability and affordability of electric utility service.²³
- that MISO's "projections for wholesale market supply margin versus peak
 demand indicate that in the not too distant future, electric utilities serving
 Indiana will need additional resources (such as construction of new generation
 resources, power purchase agreements, demand response, and energy
 efficiency) to meet peak demand.²⁴
- that renewable energy generation sources are highly desirable with respect to reducing carbon emissions, and that they are presently economically competitive with existing conventional generation resources because of technological advancements, market innovations, and federal government

²⁴ Id.

²² Indiana Office of Energy Development; 21st Century Energy Task Force

²³ 21st Century Energy Policy Development Task Force Report, pg. 9.

subsidies.25

As discussed by IPL Witness Miller, the Company's resource planning team has and will continue to consider in our integrated resource planning the "Five Pillars" of utility electric service identified in the Report (reliability, resilience, stability, affordability, and environmental sustainability). ²⁶

9. PROJECT MANAGEMENT

Q27. How will IPL manage the development of the Hardy Hills Project?

A27. As discussed by IPL Witness Cooper, IPL, through a subsidiary development company ("IPL DevCo") has entered into a MIPA for the Hardy Hills Project. This Agreement is the result of a competitive RFP process.

The MIPA establishes a fixed price for the Scope of Work in the Agreement which includes work to engineer, design, procure, construct, test, and commission the Project in accordance with the terms and conditions of the Agreement.²⁷ The Agreement establishes well-defined expectations of performance by the developer and the developer's EPC contractor.²⁸ An EPC contract is a common form of contracting arrangement used in the construction industry. The EPC contractor provides engineering, equipmet and labor procurement and construction services and has direct contact with the vendors. The Agreement requires the developer to provide a single point of contact as well as regular communications and reporting to facilitate IPL's ability to have oversight of the Project

²⁵ Id

²⁶ IPL Witness Miller Direct Testimony at Q/A 46.

²⁷ MIPA at Section 6.3.

²⁸ See for example *Id.* at Article 6.

during construction.²⁹ The Agreement requires ongoing involvement of an "Independent Engineer" in the review of the engineering and design work and ongoing construction.³⁰ Among other things, the Independent Engineer will: (i) Provide a neutral, third-party certification that the work performed by the EPC Contractor conforms with the requirements of the EPC Contract in connection with the achievement of Mechanical Completion, Project Substantial Completion and Final Completion, (ii) Approve the final punch list of items of EPC Contractor's work to be completed and the completion by the EPC Contractor of the punch list items, and (iii) Approve the Punch List Holdback. The Independent Engineer will certify that construction progress has been accomplished in line with the construction plan, including for the purposes of authorizing payment of installments of the Contract Price.³¹ Within IPL, we will also have a construction management team, led by the Engineering and Construction Director who reports to me. The Project will be managed by a Project Manager who will communicate with the Developer/EPC Contractor and the Independent Engineer. The Project Manager will report to the Engineering and Construction Director and will provide updates and progress reports to the IPL Construction Oversight Council. This will allow IPL to monitor the project progress, schedule, risk management, and project management structure to otherwise ensure that the Developer/EPC contractor comply with its obligations under the MIPA.

10. ONGOING REVIEW

21 Q28. Please discuss the Company's request for ongoing Commission review.

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²⁹Id. at Section 6.9.

³⁰ MIPA at Section 8.5.

³¹ *Id.* .

1 A28. IPL proposes that the Commission maintain an ongoing review of the construction of the
2 Project as it proceeds. IPL proposes to submit semi-annual progress reports to the
3 Commission during construction, including any revisions to the cost estimates for the
4 Project construction cost. The final project report will contain the following information:
5 (a) the actual total cost of construction; (b) the total megawatt output for the Project; and
6 (c) the actual in-service (commercial operation) date for the Project. The semi-annual
7 progress reports would be filed in this docket.

11. PUBLIC CONVENIENCE AND NECESSITY

Q29. In your opinion does or will the public convenience and necessity require the construction of the proposed Project?

11 A29. Yes. IPL has identified a need for additional capacity. The development of Hardy Hills
12 represents a reasonable least cost option for IPL to utilize in meeting its ongoing obligation
13 to provide adequate and reliable electric service and facilities.

Because the Project is a renewable solar energy resource, it will further diversify IPL's resource mix and benefit the environment by providing a new source of clean energy located in Indiana. As shown by IPL Witness Miller and the Company's 2019 IRP, the Company considered alternative options and our load forecasting and resource planning processes are reasonable. The Hardy Hills Project is the product of a competitive resource solicitation. The energy and capacity from the project is reasonably priced and this emissions-free project provides other benefits. The proposed Joint Venture with a tax equity partner enables the effective use of the Investment Tax Credit to reduce the overall cost of the project for the benefit of the Company's customers.

The location of the Hardy Hills Project in Clinton County Indiana will benefit IPL's

1 customers, the local community and the State. The development of this new solar energy

2 generation is consistent with the public's increasing interest in being served by clean

3 energy. Locating facilities in Indiana grows business development in Indiana, provides

income to land owners and local taxes to support local government projects.

5 Therefore, the Hardy Hills Project is reasonable and necessary and the public interest and

convenience will be served by IPL being granted a CPCN for its construction and the

7 associated relief sought in the Petition being approved.

12. CONCLUSION

Q30. What is your conclusion and recommendation?

10 A30. It is the Company's reasonable judgment that the Hardy Hills Project is a reasonable, least 11 cost choice to fill part of IPL's anticipated 2023 capacity shortfall. Given the evolving role 12 of solar energy generation, it is reasonable and necessary for IPL to integrate the Hardy 13 Hills Project into our portfolio. The Project is a reasonable part of an overall plan to meet 14 the future need for electricity in IPL's service area. Therefore, I recommend the 15 Commission find the Hardy Hills Project to be reasonable and necessary, issue a CPCN for 16 the Project, approve the Project as a Clean Energy Project, and authorize the accounting 17 and ratemaking sought by the Company for the Project.

Q31. Does this conclude your prefiled direct testimony?

19 A31. Yes.

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VERIFICATION

I, Kristina Lund, President and CEO of Indianapolis Power & Light Company, affirm under penalties for perjury that the foregoing representations are true to the best of my knowledge, information, and belief.

Dated February 12, 2021.

Kristina Lund

FILED
February 12, 2021
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

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PETITION
                   OF
VERIFIED
                        INDIANAPOLIS )
POWER & LIGHT COMPANY ("IPL") FOR (1)
ISSUANCE TO IPL OF A CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY FOR
THE ACQUISITION AND DEVELOPMENT BY A
WHOLLY-OWNED IPL SUBSIDIARY OF A
SOLAR POWER GENERATING FACILITY TO
BE KNOWN AS HARDY HILLS SOLAR ("THE
HARDY HILLS PROJECT"); (2) APPROVAL OF
THE HARDY HILLS PROJECT, INCLUDING A
JOINT VENTURE STRUCTURE BETWEEN AN
IPL SUBSIDIARY AND ONE OR MORE TAX
EQUITY PARTNERS AND A CONTRACT FOR
DIFFERENCES BETWEEN IPL AND
                                 THE
PROJECT COMPANY
                   THAT
                         HOLDS
                                 AND
OPERATES THE SOLAR GENERATION ASSETS,
                                        CAUSE NO. <u>4</u>5493
      CLEAN
              ENERGY
                       PROJECT
ASSOCIATED
            TIMELY
                    COST
                           RECOVERY
UNDER IND. CODE § 8-1-8.8-11; (3) APPROVAL
OF ACCOUNTING AND RATEMAKING FOR
THE HARDY HILLS PROJECT, INCLUDING AN
ALTERNATIVE REGULATORY PLAN UNDER
IND. CODE § 8-1-2.5-6 TO FACILITATE IPL'S
INVESTMENT IN THE HARDY HILLS PROJECT
THROUGH A JOINT VENTURE; AND (4) TO
THE EXTENT NECESSARY, ISSUANCE OF AN
ORDER PURSUANT TO IND. CODE § 8-1-2.5-5
DECLINING TO EXERCISE JURISDICTION
OVER THE JOINT VENTURE, INCLUDING THE
PROJECT COMPANY, AS A PUBLIC UTILITY.
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VERIFIED PETITION

Indianapolis Power & Light Company ("IPL", "Company", or "Petitioner") hereby petitions the Indiana Utility Regulatory Commission ("Commission") for the following approvals and authority for the acquisition and development of a solar power generating facility to be known as Hardy Hills Solar being undertaken by IPL: (1) issuance to IPL of a certificate of

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public convenience and necessity ("CPCN") for the acquisition and development, by a wholly-

owned IPL subsidiary, of Hardy Hills Solar, including development of transmission

interconnection and network upgrades ("Hardy Hills Project" or "Project"); (2) approval of the

Hardy Hills Project, including a Joint Venture structure between an IPL subsidiary and one or

more tax equity partners, and a contract for differences between IPL and the Project Company

that holds and operates the solar generation facility, as a Clean Energy Project, and associated

timely cost recovery under Ind. Code § 8-1-8.8-11; (3) approval of accounting and ratemaking

for the Hardy Hills Project including an Alternative Regulatory Plan ("ARP") to facilitate IPL's

investment in the Hardy Hills Project through the Joint Venture; and (4) to the extent necessary,

issuance of an order pursuant to Ind. Code § 8-1-2.5-5 declining to exercise jurisdiction over the

Joint Venture, including the Project Company, as a public utility. In accordance with 170 IAC

1-1.1-8 and 1-1.1-9 of the Commission's Rules of Practice and Procedure, IPL submits the

following information in support of this Petition.

IPL's Corporate Status and Operations

1. IPL is a public utility corporation organized and existing under the laws of the

State of Indiana with its principal office and place of business at One Monument Circle,

Indianapolis, Indiana 46204. IPL is engaged in rendering electric utility service in the State of

Indiana.

2. IPL provides retail electric utility service to more than 500,000 retail customers

located principally in and near the City of Indianapolis, Indiana, and in portions of the following

Indiana counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, Owen,

Putnam, and Shelby Counties.

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3. IPL is part of The AES Corporation. AES is a Fortune 500 global power company

that operates on four continents. AES has substantial experience in renewable energy around the

world. The AES US strategic business unit, including US Utilities, is headquartered in

Indianapolis, Indiana, as is AES US Services, LLC, which is the service company that provides

services to IPL and other AES affiliates.

4. CDP Infrastructure Fund GP, a wholly-owned subsidiary of La Caisse de depot et

placement du Quebec, has a minority ownership interest in IPALCO Enterprises, Inc.

("IPALCO", IPL's immediate parent company, and in AES U.S. Investments, Inc., IPALCO's,

immediate parent company.

Petitioner's "Public Utility" Status

5. IPL is a "public utility" under Ind. Code §§ 8-1-2-1 and 8-1-8.5-1. IPL is also an

"energy utility" providing "retail energy service" as defined in Ind. Code §§ 8-1-2.5-2 and 3 and

"public utility service" as defined in Ind. Code § 8-1-8.5-1. IPL is also an "eligible business" as

that term is defined in Ind. Code § 8-1-8.8-6. IPL is subject to the jurisdiction of this

Commission in the manner and to the extent provided by the Public Service Commission Act, as

amended, and other pertinent laws of the State of Indiana.

6. IPL is also subject to the jurisdiction of the Federal Energy Regulatory

Commission ("FERC").

7. As authorized by the Commission's Order, in Cause No. 42027, dated

December 17, 2001, IPL's transmission system is under the functional control of the

Midcontinent Independent Transmission System Operator, Inc. ("MISO"), a FERC-approved

regional transmission organization ("RTO"). IPL's transmission system is used for the provision

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of open access nondiscriminatory transmission service pursuant to MISO's Open Access

Transmission Tariff on file with the FERC. Charges and credits are billed to IPL as a member of

MISO for functional operation of the transmission system, management of the MISO markets,

and general administration of the RTO. As a MISO member, IPL must also adhere to the federal

reliability standards developed and enforced by the North American Electric Reliability

Corporation ("NERC"), which is the electric reliability organization certified by the FERC to

establish and enforce reliability standards for the bulk power system. ReliabilityFirst ("RF") is

one of eight NERC Regional Entities and is responsible for overseeing regional reliability

standard development and enforcing compliance. IPL's transmission facilities are wholly

located with the RF region.

IPL's Electric Utility System

8. IPL owns and operates electric generating, transmission, and distribution plant,

property, and equipment and related facilities, which are used and useful for the convenience of

the public in the production, transmission, delivery, and furnishing of electric energy, heat, light,

and power. IPL has maintained and continues to maintain its properties in a reliable state of

operating condition.

9. IPL's Company-owned generating facilities have an installed capacity of

approximately 3,436 megawatts ("MW") located at four (4) separate generation sites.1

10. The IPL transmission system consists of approximately 458 circuit miles of lines

at 345,000 volts ("345 kV"), 408 circuit miles of line at 138,000 volts ("138 kV") and associated

substations. There is a 345 kV ring around Marion County with multiple lines that interconnect

¹ IPL 2019 IRP Volume 1 at 60-61.

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into the ring at four different locations. Inside of the 345 kV ring is a 138-kV ring/grid. These

two rings are connected through 345 kV to 138 kV auto transformers at six locations. This

allows power to flow from the 345 kV transmission system to the 138 kV system. IPL has

generation connected to the 345 kV system at the Petersburg Generating Station and generation

connected to the 138 kV system at Harding Street Station, Eagle Valley Station, and the

Georgetown Generating Station.

11. The IPL transmission system operates as part of a larger integrated network

system, commonly referred to as the Eastern Interconnection. The IPL transmission system is

directly connected to the transmission systems of Indiana Michigan Power Company ("AEP"),

Vectren Corporation ("Vectren"), Hoosier Energy Rural Electric Cooperative, Inc. ("HE"), and

the electric system jointly owned by Duke Energy Indiana ("Duke"), Indiana Municipal Power

Agency and Wabash Valley Power Association, Inc.

12. Through the interconnections with these other utilities, power can flow into and

out of the IPL transmission system. The IPL transmission system is connected at both the 345

kV and 138 kV levels with the other utilities. At the Petersburg Generation Station, there are

345 kV level interconnections with Duke and AEP, and 138 kV level interconnections with

Duke, Vectren, and HE. In the Indianapolis area, IPL's transmission system has two 345 kV

level interconnections with Duke and AEP, and 138 kV level interconnections with Duke.

13. The Company's distribution system consists of approximately 5059 circuit miles

of underground primary and secondary cables and 6,119 circuit miles of overhead primary and

secondary wire.

14. IPL's property is classified in accordance with the Uniform System of Accounts

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("USOA") as prescribed by the FERC and approved and adopted by this Commission.

15. In order to continue to properly serve the public located in its service area and to

execute its duties as a public utility, IPL has made and continues to make numerous investments

in its electric utility systems and resources.

16. IPL also engages in power purchase transactions through MISO as necessary to

meet the demands of its customers.

Applicable Law

17. IPL considers the provisions of the Public Service Commission Act, as amended,

to be applicable to the subject matter of this Petition, including Ind. Code §§ 8-1-8.5-1 et seq., 8-

1-8.8-11, 8-1-2-10, 14, and 42(a), and 8-1-2.5-5 and 6. IPL elects to become subject to Ind.

Code §§ 8-1-2.5-5 and 6 for purposes of the ARP proposed below and further detailed in IPL's

case-in-chief testimony.

IPL Integrated Resource Plan and All-Source Request For Proposals.

18. Indiana's utility regulatory framework requires IPL to submit an Integrated

Resource Plan ("IRP") to the Commission every three years. Ind. Code § 8-1-8.5-3(e)(2); 170

Indiana Administrative Code ("IAC") 4-7-2.

The IRPs are subject to a rigorous stakeholder process. IRPs describe how the utility plans to deliver safe, reliable, and efficient electricity at just and reasonable rates.

Further, these plans must be in the public interest and consistent with state energy and environmental policies. Each utility's IRP explains how it will use existing and future resources to meet customer demand. When selecting these resources, the utility must

consider a broad range of potential future conditions and variables and select a

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combination that would provide reliable service in an efficient and cost-effective

manner.2

19. IPL's most recent IRP was submitted to the Commission on December 16, 2019

("2019 IRP"). Technological change, power market evolution, changing customer preferences

and expectations, resource costs, a changing regional resource mix, and the growing importance

of carbon reduction all played into IPL's planning and process for the 2019 IRP.³

20. The objective of IPL's IRP is to identify a preferred resource portfolio to provide

safe, reliable, sustainable, and reasonable least cost electricity service to IPL customers.⁴ The

study period for IPL's 2019 IRP is 2020-2039, giving due consideration to potential risks and

stakeholder input. In accordance with the Commission's rules, IPL's 2019 IRP includes a

Preferred Resource Portfolio and a Short Term Action Plan for the next three-year period

following the IRP (2020-2023).⁵

IPL's 2019 IRP Preferred Resource Portfolio, Short Term Action Plan provides 21.

for the retirement of 630 MW of IPL's coal-fired generation (Petersburg Station Units 1 and 2)

by 2023; 2) near term replacement of approximately 250 megawatts (MW) unforced capacity

("UCAP")⁶; (3) demand-side management and energy efficiency programs; and (4) review and

evaluation of bids from an all-source request for proposals ("RFP") to competitively procure

replacement capacity available beginning in the 2023-2024 MISO Planning Year.⁷

²https://www.in.gov/iurc/energy-division/electricity-industry/integrated-resource-plans/

³ IPL 2019 IRP Volume 1 at xix.

⁴ IPL 2019 IRP Volume 1 at 1; also 170 IAC 4-7-4(24).

⁵ 170 IAC 4-7-2(c)(3); 170 IAC 4-7-4(1).

⁶ An updated analysis increased the capacity shortfall in the IRP from approximately 200 MW to 250 MW. This updated analysis is addressed in the prefiled testimony of IPL Witness Miller.

⁷ IPL 2019 IRP Volume 1 at xx, 201; also IPL All-Source Request for Proposals issued December 20, 2019 ("RFP")

at 1-2.

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22. IPL's Preferred Resource Portfolio is based on a comprehensive set of stakeholder

informed modeling and analysis and comparison of each portfolio on attributes for cost, risk, and

environmental impact. Additionally, IPL considered other qualitative factors in the decision,

including employee and community impact, the ability of the plan to react to changing market

conditions, and the risks that each portfolio could introduce to IPL customers.⁸

23. The 2019 IRP modeling indicated that a combination of wind, solar, storage, and

energy efficiency would be the lowest cost options for the replacement capacity. 9 IPL assessed

the type, size, and location of resources following receipt of bids through the RFP.¹⁰

24. IPL contracted Sargent & Lundy, LLC ("Sargent & Lundy") to manage the All-

Source Request For Proposal ("RFP") process. The RFP solicited proposals for all or a portion

of IPL's forecasted capacity short position. IPL did not submit a self-build proposal.

25. In order to ensure impartiality in the evaluation and selection process, Sargent &

Lundy performed all administration, response accumulation, Phase 1 evaluation and reporting in

a manner that maintained the anonymity of the RFP respondents to the IPL team.

26. The Sargent & Lundy Phase 1 process led to the initial culling of proposals and

resulted in 38 proposals, including six technology types or combinations thereof, being moved to

Phase 2 for further evaluation. The initial shortlisting deliberately advanced proposals within

buckets by each technology type so that all proposal types or categories would have the

opportunity for more in-depth evaluation and consideration. Sargent & Lundy again facilitated

⁸ IPL 2019 IRP Volume 1 at xxii.

⁹ IPL 2019 IRP Volume 1 at xx.

10 Id.

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this Phase 2 process to maintain the anonymity of respondents and proposals. Phase 2 produced

a short list of proposals that were advanced to Phase 3.

27. In Phase 3, IPL evaluated the commercial terms and pricing of the shortlisted

proposals, conducted due diligence, and began negotiations with the bidders. Prior to Phase 3,

no one on the IPL evaluation team had any knowledge of specific bidder identities. IPL also

retained 1898 & Co., a Burns & McDonnell Company ("1898 & Co.), to perform detailed

interconnection and congestion evaluations of the remaining shortlisted proposals as part of the

Phase 3 evaluation.

28. The Hardy Hills Project, which is the subject of this Petition, was one of the

proposals which was the subject of further evaluation and negotiation in Phase 3.

The Hardy Hills Project

29. IPL has reached a definitive agreement with Invenergy Solar Project

Development North America LLC ("Invenergy") which is developing the Hardy Hills Solar

through Hardy Hills Solar Energy LLC, a special purpose entity (also referred to as ProjectCo).

The definitive agreement, the Membership Interest Purchase, Project Development and

Construction Management Agreement ("MIPA"), is a confidential document and will be filed in

this Cause subject to the protection of the MIPA from public disclosure.

30. The MIPA provides that subsequent to regulatory approval, Invenergy will sell

ProjectCo to AES Indiana Devco Holdings 1, LLC, a limited liability company owned by IPL.

As explained below, ProjectCo will ultimately be owned by Joint Venture, LLC.

31. Hardy Hills is a 195 MWac, 240.9 MWdc, solar facility utilizing approximately

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581,594 solar panels over an approximately 1,780 acre solar panel farm located in Clinton

County, Indiana. Transmission and substation facilities are planned to be located in Clinton

County.

32. The Hardy Hills location is near IPL's service territory. Its location is beneficial

for deliverability support for the IPL system. Its location also facilitates IPL's ability, through a

wholly-owned subsidiary, to manage operations and maintenance at the Hardy Hills Project.

Locating a utility scale solar facility near IPL's service area will showcase the new clean energy

resource in Central Indiana and this in turn supports economic development in IPL's service

area.

33. The Hardy Hills Project will tap Duke Energy Indiana's New London – Frankfort

230 kV line adjacent to the site. Hardy Hills is designed to qualify for 30% Investment Tax

Credit. The commercial operation date ("COD") for the project is Q2 2023, prior to the start of

the 2023-2024 MISO Planning Year.

34. Hardy Hills will contribute 97.5 MW of UCAP to IPL's 2023-2024 MISO

Planning Year projected capacity shortfall of approximately 250MW (UCAP).

35. The separate petition by Hardy Hills Solar Energy LLC for certain determinations

by the Commission with respect to its jurisdiction over Hardy Hills Solar as a generator of

electric power was filed with the Commission on February 5, 2021 and has been docketed as

Cause No. 45490.

Joint Venture and Capacity Agreement and Contract for Differences

36. The Joint Venture structure refers to a limited liability company (Joint Venture,

Page 11 of 28

LLC) operating as a partnership for US tax purposes that will own ProjectCo (owner of the solar

generation). The Joint Venture, LLC will be jointly-owned by a subsidiary of IPL (IPL Sponsor)

and by one or more Tax Equity Partners ("TEP"). IPL Sponsor will be the managing member of

the Joint Venture, LLC and IPL will control IPL Sponsor with respect to this role.

37. The Joint Venture investment structure reduces the overall cost of the Hardy Hills

Project for the benefit of IPL's customers.

38. After the Hardy Hills COD, ProjectCo will generate and sell electricity to MISO

on a merchant basis. Its price will effectively be fixed through the use of the Capacity

Agreement and Contract for Differences agreement ("CfD") between IPL and ProjectCo. IPL

will acquire energy from MISO at the market price. If the price at which ProjectCo sells

electricity to MISO is below an agreed price, IPL will pay the ProjectCo the difference between

the proceeds received from the sale and the stated price. If the price is above the stated price,

ProjectCo will pay IPL, in each case, through the CfD terms. IPL will also receive all capacity

credits and renewable energy certificates from the Hardy Hills Project.

39. Once the TEP's internal rate of return is reached ("Flip Date"), IPL, through the

IPL Sponsor member of Joint Venture LLC, will have an option to purchase the TEP's

membership interest in Joint Venture, LLC. In this proceeding, IPL does not seek approval of

any amounts related to the purchase of the TEP's membership interests in the Joint Venture, LLC

should IPL exercise this option following the Flip Date. The Company will keep the

Commission apprised of IPL Sponsor's plans regarding the exercise of this option as the time

nears and will request Commission approval and cost recovery as necessary or appropriate in a

separately docketed proceeding.

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Clean Energy Project

40. The Hardy Hills Project is reasonable and necessary. IPL requests Commission

approval of the Project, including the CfD, as a Clean Energy Project pursuant to Ind. Code §

8-1-8.8-11.

41. IPL requests the Commission authorize IPL to recover the CfD costs net of credits

from retail customers and credit ProjectCo cash distributions to retail customers via a rate

adjustment mechanism in accordance with Ind. Code § 8-1-8.8-11. This statute provides for

timely cost recovery as a financial incentive for a Commission-approved renewable energy

project. Such timely cost recovery is also consistent with Ind. Code § 8-1-2-42(a).

Alternative Regulatory Plan and Declination of Jurisdiction

42. Pursuant to Ind. Code § 8-1-2.5-6, IPL requests approval of an alternative

regulatory plan ("ARP") to facilitate the establishment of the Joint Venture, LLC, as described

above and further detailed in IPL's prefiled case-in-chief.

43. The accounting and ratemaking to be used for the ARP is detailed in IPL's case-

in-chief (IPL Witness Rogers). The ARP will authorize IPL to reflect its investment, through a

wholly-owned subsidiary, in Joint Venture LLC in IPL's net original cost rate base and grant to

IPL associated accounting and ratemaking authority. The requested accounting and ratemaking

authority, includes authority to record the costs incurred to analyze, evaluate and develop the

Hardy Hills Project ("Development Costs") as a regulatory asset and to recover such costs in a

future basic rate case.

44. More specifically, IPL proposes to create a regulatory asset for its investment,

through a wholly-owned subsidiary, in Joint Venture LLC and a regulatory asset for the

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Development Costs. IPL proposes to begin amortizing the regulatory assets once the assets are

reflected in customer rates in IPL's next basic rate case. IPL seeks authority to record carrying

charges on the regulatory asset balance reflecting IPL's investment in the Hardy Hills Project

until the regulatory asset is reflected in customer rates in IPL's next basic rate case. IPL is not

requesting carrying charges on the deferred Project Development Costs. IPL also seeks approval

to include, in its next basic rate case, the balance of these regulatory assets in net original cost

rate base and in the value of its rate base for purposes of Ind. Code § 8-1-2-6.

45. To the extent necessary and pursuant to Ind. Code § 8-1-2.5-5, IPL also requests

the Commission to decline to exercise its jurisdiction over Joint Venture, LLC, including

ProjectCo, as a public utility.

Public Interest and Statutory Considerations

46. The ARP allows IPL to invest in the Hardy Hills Project in a way that reduces

overall costs of the project for the benefit of IPL's customers. As explained in IPL's prefiled

case-in-chief, approval of the ARP and declination of jurisdiction furthers the continuing goal of

the Commission in the provision of efficient and economic retail energy services, facilitates an

environment whereby Indiana consumers will have available state-of-the art technology and

energy services, and otherwise serves the public interest.

Procedural and Other Matters

47. IPL is filing its case-in-chief contemporaneous with its Petition, including direct

testimony, attachments and workpapers. An index of the filing is attached to this Petition as

Exhibit A.

48. A motion for protective order and supporting affidavits is being filed

contemporaneous with this Petition to protect certain confidential, proprietary, competitively sensitive and/or trade secret information included with IPL's filing from public disclosure.

49. In accordance with 170 IAC 1-1.1-9(a)(8), IPL and the Indiana Office of Utility Consumer Counselor have agreed on the following procedural schedule and associated terms to satisfy the 120 day schedule provided in Ind. Code § 8-1-8.8-11(d):

a. Schedule:

Fri. Feb. 12	IPL Petition & Filing of Case in Chief.
Mon. Apr. 12	OUCC and Intervenors Filing of Case in Chief.
Mon. Apr. 26	IPL Petitioner's Rebuttal/OUCC & Intervenors Cross Answering, if any.
Wed-Thur. May 12-13	Evidentiary hearing.
Mon. May 17	IPL proposed order/post hearing brief.
Mon. May 24	OUCC and Intervenor proposed order/brief.
Fri. May 28	IPL Reply.
Wed. Jun. 16	Stipulated day "120" to conclude on the Wednesday (regular Commission conference day) following actual day 120.

- b. <u>Service</u>. The parties will provide same day service filings via email, hand delivery or large file transfer.
- c. <u>Discovery</u>. Discovery is available to all parties and shall be conducted on an informal basis. Any response or objection to a discovery request shall be made within ten (10) calendar days of the receipt of such request until April 12, 2021. Thereafter, any response or objection to a discovery request shall be made within five (5) calendar days of the receipt of such request. Any discovery communication received after noon on a Friday or after 5:00 p.m. on any other business day shall be deemed to have been received the following business day. The last discovery response due date shall be two (2) business days before the evidentiary hearing. The Parties may conduct discovery through electronic means. Subject to the protection of confidential information, all parties will be served with discovery requests and responses.

Publication of Notice

50. IPL will publish notice of the filing of this Petition in accordance with Ind. Code §8-1-2.5-6(d). In accordance with 170 IAC 1-1.1-9 (c), following publication of the notice, IPL will certify to the Commission that the publication has occurred, listing the names of the newspapers and the county or counties in which the notice was published. In accordance with 170 IAC 1-1.1-9 (d), IPL will certify to the Commission that a substantially similar notice was also posted on IPL website. IPL will file the Publisher's Affidavits associated with the notices once all such affidavits have been received and offer the Publisher's Affidavits into evidence.

Petitioner's Authorized Representatives

51. The names and address of IPL's attorneys in this matter who are duly authorized to accept service of papers in this Cause on behalf of IPL are:

Teresa Morton Nyhart (Atty. No. 14044-49) Jeffrey M. Peabody (Atty. No. 28000-53) Jamal E. Abdulrasheed (No. 35872-49) BARNES & THORNBURG LLP

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WHEREFORE, IPL respectfully requests the Commission to promptly publish notice, make such investigation and hold such hearings as are necessary and advisable, and thereafter make and enter an order in this Cause:

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(i) Issuing a certificate of public convenience and necessity to IPL for the Hardy

Hills Project;

(ii) Approving the Hardy Hills Project, including the Capacity Agreement and

Contract for Differences, as a Clean Energy Project and authorizing timely cost recovery as

proposed by IPL;

(iii) approving IPL's alternative regulatory plan as set forth above and further detailed

in IPL's case-in-chief, including the requested accounting and ratemaking relief;

(iv) declining to exercise any jurisdiction over the Joint Venture, including ProjectCo;

and

(v) granting to IPL such other and further relief in the premises as may be appropriate

and proper.

Dated this 12 day of February 2021.

INDIANAPOLIS POWER & LIGHT COMPANY

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Ву

Kristina Lund

President and CEO of Indianapolis Power & Light

Company

VERIFICATION

I, Kristina Lund, President and CEO of Indianapolis Power & Light Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

Dated: February 12, 2021.

Kristina Lund

XusmyP

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing was served this 12th day of February, 2021, by electronic transmission or United States Mail, first class, postage prepaid on:

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Indianapolis Power & Light Company Request for Approvals For Hardy Hills Project

Index of Issues, Requests, and Supporting Witnesses¹

I. Executive Summary

Based on its 2019 Integrated Resource Plan ("IRP") Short Term Action Plan and updated capacity need analysis, IPL anticipates a 2023 capacity shortfall of approximately 250 MW of replacement unforced capacity ("UCAP"). To address part of this capacity need, IPL, through a subsidiary, has entered into an agreement to acquire and develop a solar generation facility to be known as Hardy Hills Solar ("Hardy Hills", "Hardy Hills Project" or "Project"). This agreement is subject to Commission approval.

The Project is eligible for a 30% federal investment tax credit ("ITC"). In order to reduce costs for the benefit of customers, IPL proposes to invest in a Joint Venture ownership structure with a tax equity partner ("TEP").

Hardy Hills is located in Clinton County, Indiana and will contribute 97.5 MW of UCAP. The solar generation will be sold into MISO. IPL will enter into a Capacity Agreement and Contract for Differences ("CfD") with the Project Company ("ProjectCo") that owns the solar generation assets.

The overall transaction is structured to enable IPL to exercise oversight while the facility is being built and to manage its operation and maintenance once the new Project becomes commercially operable.

Hardy Hills will provide a clean and sustainable Indiana located renewable resource and will further diversify the Company's generation portfolio, which in turn safeguards customers from fuel price fluctuations, and changes in regulatory practices that can drive up the cost of a particular fuel (e.g., environmental regulations). The Company's current and potential customers have expressed an interest in increased use of clean and sustainable energy as well as in the further diversification of resources. This "home grown" resource provides energy security and economic development benefits without compromising the reliability and affordability of the Company's electric utility service. The Project also offers the traditional economic benefits of local Indiana business investment, revenue generation, and job creation.

The Hardy Hills Project results from an All-Source Request for Proposals ("RFP") issued by IPL at the end of 2019. To ensure impartiality, IPL contracted with Sargent & Lundy ("S&L") to manage the RFP and bid evaluation process in a manner that maintained the anonymity of the

¹ This Index of the Company's case-in-chief is intended to highlight issues and is not an exhaustive list of Utility Company's requests in this proceeding. A complete account of Utility Company's requested relief can be found in the Company's filing in this Cause, including the petition, case-in-chief, and workpapers.

RFP respondents to the IPL team until the contract negotiation and due diligence phase (Phase 3). IPL did not submit a self-build proposal in the RFP process.

Hardy Hills is advanced in terms of development and permitting and can be available to IPL within the time frame needed to address IPL's anticipated 2023 capacity need. IPL has studied the interconnection and congestion costs and has assessed the total Project cost. The development of Hardy Hills represents a reasonable, least cost option for IPL to utilize in meeting its ongoing obligation to provide adequate and reliable electric service and facilities.

IPL asks the Commission to approve the Project, including the Joint Venture investment structure and CfD as a Clean Energy Project and to issue to IPL a certificate of public convenience and necessity ("CPCN") for the acquisition and development of this new solar generation facility. IPL asks the Commission to approve associated accounting and ratemaking, including authorizations necessary to facilitate the Joint Venture structure, recovery of Project development costs and timely ratemaking for the CfD to be administered in conjunction with IPL's ongoing Fuel Adjustment Clause ("FAC") proceedings. Finally, IPL requests ongoing review and proposes to submit semi-annual progress reports to the Commission for approval.

II. Supporting Witnesses

	IPL Witnesses	
Name	Position	Major Subject Area
Kristina Lund	President and CEO of AES US Utilities, including Indianapolis Power & Light	 Overview of Project and of relief sought.
	Company	 Project is Clean Energy Project.
		 Importance of timely decision.
		 Company's work to meet customers' ongoing need for reliable service and diversification of resources.
		 Project benefits.
		Project management.
		Ongoing review.
		 Public convenience and necessity.

IPL Petition Exhibit A

	IPL Witnesses continued	
G. Aaron Cooper	Chief Commercial Officer, AES US Utilities	IPL All-Source Request for Proposal ("RFP").
		RFP bid evaluation.
		 Presentation of proposed Project.
		 Membership Interest Purchase, Project Development and Construction Management Agreement ("MIPA").
		Proposed Capacity Agreement and Contract for Differences ("CfD").
		 Renewable Energy Certificates and other generation benefits.
		Best Estimate of Hardy Hills Project.
Frank J. Salatto	Director, AES US Tax Reporting	■ Investment Tax Credits.
		 Joint Venture and TEP overview and structure.
		Other tax issues.
Matthew R. Thibodeau	Senior Vice President, Sargent & Lundy	 RFP process.
	("S&L")	S&L role as 3 rd party facilitator of RFP.

IPL Petition Exhibit A

	IPL Witnesses continued	
Erik K. Miller	IPL Manager, Resource Planning	■ IPL's 2019 IRP Preferred Resource Portfolio Short Term Action Plan and anticipated 2023 Capacity Need.
		 Resource planning production cost analysis used in RFP evaluation.
		Levelized Cost of Energy ("LCOE").
		 Proposed Project is consistent with IPL's 2019 IRP Preferred Resource Portfolio Short Term Action Plan.
		 Consideration of Resource Alternatives.
		Indiana 21st Century Task Force Report and the IURC/SUFG 2020 Study Report.
Danielle S. Powers	Senior Vice President, Concentric Energy Advisors, Inc.	 RFP Phases 2 & 3 Ranking Analysis – Present Value Revenue Requirements ("PVRR") modeling.
Matthew E. Lind	Director, Resource Planning & Market Assessments, 1898 & Co.	 Interconnection Reliability and Congestion Evaluation for Phase 3 proposals.

	IPL Witnesses continued	
Ronald J. Moe	Vice President at Leidos Engineering, LLC	Comparative LCOE analysis.
Chad A. Rogers	IPL Manager, Regulatory Affairs	 Accounting and ratemaking, including alternative regulatory plan ("ARP") to facilitate investment in Joint Venture.
		 Declination of jurisdiction over Joint Venture, including ProjectCo, as a public utility.
		Timely cost recovery for CfD.
		Estimated customer rate impact.

III. Index of Issues and Requests

Subject	General	Witness/Other Reference
Statutory Authority	• IC 8-1-8.8-11 (Clean Energy Project).	Petition, ¶ 17
	• IC 8-1-8.5 (CPCN).	
	• IC 8-1-2.5-5 (Declination of Jurisdiction).	
	• IC 8-1-2.5-6 (Alternative Regulatory Plan).	
	• IC 8-1-2-10, 14 & 42(a) (Other Accounting & Ratemaking Authority).	
Case Timeline	• 120 Days.	• IC 8-1-8.8-11(d).
Notice	IPL will public notice	■ IC 8-1-2.5-6(d).
		Petition, ¶ 50.
		Rogers.

	FILING INDEX SUMMARY Continued	-
IPL characteristics	Service area	■ Petition, ¶¶ 2, 9.
	Generating Resource Portfolio	Lund.
	Hardy Hills Project Description	
Project	The Hardy Hills Project is located in Clinton County, Indiana. Hardy Hills will contribute 195 MWac of installed capacity ("ICAP") and 97.5 MW of unforced capacity ("UCAP"). The facility is expected to become commercially operable in second quarter 2023. Invenergy Solar Project Development North American LLC ("Invenergy") is the project developer.	 Petition, ¶¶ 29-24. Lund (overview of Project). Cooper (Project description and associated acquisition and development details). Salatto (Investment Tax Credits and Joint Venture structure).
	IC 8-1-8.8-11Clean Energy Project	
Request	IPL requests Commission approval of the Hardy Hills Project as a "Clean Energy Project" and associated accounting and ratemaking, including timely cost recovery under IC 8-1-8.8-11.	 Petition ¶ 40. Lund (overview of relief sought). Rogers (accounting and ratemaking, including timely cost recovery).
IC 8-1-8.8-6	IPL is an "eligible business".	• Lund
IC 8-1-8.8-2, 10	Hardy Hills Project falls within definition of "Clean Energy Project".	- Lund

	FILING INDEX SUMMARY Continued	
IC 8-1-8.8-11.	Hardy Hills Project and associated Joint Venture structure is reasonable and necessary.	Lund (overview and project benefits).
		 Cooper (Project description and competitive selection process).
		 Salatto (Joint venture structure).
		 See also CPCN index below.
		Moe (LCOE analysis).
IC 8-1-8.8-11	Project Costs.	Petition, ¶41.
IC 8-1-8.8-11(a)(1), (4) & (5); also IC 8-1-2-10, 14	• IPL requests timely ratemaking recovery of costs and credits under a CfD between IPL and Project Company that holds the solar generation assets.	• See CPCN Best Estimate below for capital investment.
	 IPL requests the timely ratemaking be implemented through a rate adjustment mechanism to be administered with IPL's FAC proceedings. 	Rogers (accounting and ratemaking including timely
	• The cost recovery administered through its FAC, this cost recovery would not be subject to the FAC (d)(1) test or benchmarks.	ratemaking for CfD and recovery of Project
	• IPL proposes to flow funds distributed to IPL from the Joint Venture to IPL customers in a timely manner administered through IPL's FAC in a similar method as the cash flows for the CfD as discussed below.	Development costs). Cooper (presentation of CfD).

	FILING INDEX SUMMARY Continued	
	IC 8-1-8.5 – Certificate of Public Convenience and Necessity	
IPL Request	• IPL requests the Commission to issue a CPCN for the acquisition and development of Hardy Hills through the transactions and joint venture described in IPL's testimony.	Petition, p. 1.Lund (overview of relief sought).
		 Cooper (presentation of Hardy Hills Project).
		 Salatto (Joint Venture structure).
IC 8-1-8.5-1	IPL is a public utility	Petition ¶ 1.
IC 8-1-8.5-4	Consideration of resource options	 Miller; IPL's 2019 IRP (included with Miller testimony).
		 Cooper (All- Source RFP; consideration of purchased power).
IC 8-1-8.5-5(b)(1)	Best Estimate	■ Cooper.

	FILING INDEX SUMMARY Continued	
IC 8-1-8.5-5(e)	Estimated costs are, to the extent commercially practicable, the result of competitively bid engineering, procurement, or construction contracts	 Cooper. Thibodeau (3rd party facilitator of RFP).
	Reliability and solicitations of competitive bids to obtain purchased power capacity and energy from alternative suppliers.	Powers (Concentric PVRR modeling).
		Lind (1898 Interconnectio n Reliability and Congestion Evaluation).
		Moe (comparative LCOE analysis supports conclusion that cost is reasonable).
IC 8-1-8.5-5(b)(2)	Consistency with IPL's 2019 IRP and Commission's analysis for expansion of electric generating capacity.	 Lund (overview) Cooper (Project analysis and fit with capacity need)
		Miller (capacity need and IRP consistency; Indiana 21st Century Task Force Report and the IURC/SUFG 2020 Study Report.)

	FILING INDEX SUMMARY Continued		
IC 8-1-8.5-5(b)(3)	Public Convenience and Necessity.		Lund (Project benefits, public convenience and necessity).
IC 8-1-8.5-6	Ongoing review.	•	Lund.
	DECLINATION OF JURISDICTION IC 8-1-2.5-5		
Request	• IPL asks the Commission to decline to exercise jurisdiction over the Joint Venture, including the ProjectCo that will own the solar generation assets, as a public utility.		Rogers.
	The public interest will be served by the Commission declining to exercise jurisdiction as requested by IPL.	•	Rogers.
	ALTERNATIVE REGULATORY PLAN IC 8-1-2.5-6	-	
	• IPL seeks approval to record its investment in the Project and its Project development costs as regulatory assets in FERC Account 182. IPL will begin to amortize the regulatory assets once the regulatory assets are reflected in customer rates in IPL's next basic rate case. IPL seeks authority to record carrying charges on the regulatory asset balance reflecting IPL's investment in the Hardy Hills Project until the regulatory asset is reflected in customer rates in IPL's next basic rate case. IPL is not requesting carrying charges on the Project Development Costs. IPL also seeks approval to include, in its next basic rate case, the balance of these regulatory assets in net original cost rate base and in the value of its rate base for purposes of Ind. Code § 8-1-2-6.		Rogers.
	The proposed ARP is in the public interest		Rogers