# ALBUQUERQUE DEVELOPMENT COMMISSION Industrial Revenue Bond Hearing

August 1, 2024

Case #2024-8 Kairos IRB

IRB-25-1: Kairos Power, LLC. Project

**REQUEST:** Approval of \$300,000,000 in City Industrial Revenue Bonds is requested.

**PROJECT SUMMARY:** Kairos Power LLC, is a California-based energy technology and engineering company launched out of a broad research effort at U.S. universities and national laboratories, with whom the company still maintains many positive synergistic relationships. It was founded to accelerate the development of a clean, safe, innovative technology that has the potential to transform the energy landscape nationally and internationally. The company is requesting \$300 million in City-issued industrial revenue bonds (IRB). In 2019, the company applied for and received \$125 million in City-issued IRBs. City IRBs are issued to support eligible economic development projects that meet established policies and plans. The Company is responsible for funding the purchase of the bonds; no City funds are utilized to purchase or pay off the bonds, and no City credit is used to enhance the bonds.

(The Company also is requesting assistance as a Local Economic Development Act—LEDA—Project, but that will be analyzed separately.) The purpose of the proposed project operation is the research, development, and testing of advanced salt coolant technology and related systems. Kairos is seeking to build a Salt Production Facility on the west side of campus at its existing site in the Mesa del Sol Development at 5201 Hawking Dr SE. The new facility will use a proprietary chemical manufacturing process to produce a fluoride salt that will be used as the primary heat transfer fluid for Kairos's Fluoride Salt-Cooled High Temperature Reactor (KP-FHR) technology. The project will support development of a demonstration reactor that Kairos will build in Oak Ridge, Tennessee as part of the U.S. Department of Energy's Advanced Reactor Demonstration Program.

In addition, Kairos is seeking to build two fuel development lab facilities at the existing site. These facilities will focus on prototyping and innovation in design-build-test cycles to advance Kairos's fuel production capabilities prior to commercial deployment. In the Pebble Development Lab, Kairos will develop manufacturing processes to produce annular graphite fuel pebbles using surrogate materials. In the TRISO Development Lab, Kairos will use natural and depleted uranium to optimize production techniques for TRISO particles. Only natural and depleted uranium material will be handled at Kairos's Mesa del Sol facility.

It is important to note that nuclear material will not be utilized on site.

The project represents an additional \$300 million investment by the company by the end of 2028. Kairos Power Inc. will create at least 100 new high-paying economic base jobs.

The operations includes the building at 5201 Hawking Dr. SE, Albuquerque in the Employment Center of the Mesa Del Sol Planned Community plus additional surrounding acreage. The proposed use of the facility by the Company would not require a change in zoning. The purpose of the Planned Community Zone is to accommodate very large scale residential or mixed use-communities. There are no particular environmental impacts associated with this Project.

This project builds upon Albuquerque and New Mexico's legacy in the development of alternative energy methods and products. The Company has close ties with Sandia and Los Alamos Labs, the Department of Energy, as well as UNM, NM State University, and NM Tech.

The majority of the 100 new positions will be primarily engineering and technical positions, are considered full time positions, and come with full employee benefits with the company paying 100% of benefits' costs.

The company is anticipating it will utilize the Job Training Incentive Program and is looking to spearhead a consortium focused on key technical skills relevant to Kairos, the national labs, other interested companies, and educational institutions (CNM, NMSU, UNM, and NM Tech) in the area.

The State of New Mexico and its local governments are empowered to offer discretionary incentives to companies that support economic development projects that foster, promote, and enhance local economic development efforts. The City has long focused its Industrial revenue bond program around industries and companies that are considered "economic-base":

<u>Economic Base</u>: Fifty-one percent or more of the revenues of the New Mexico operation are generated outside the Albuquerque Metropolitan Statistical Area. Revenues generated by contracts with Federal entities are considered to be from outside the metropolitan area. This requirement does not apply to educational or healthcare facilities seeking industrial revenue bonds. Credit also may be assigned to those projects that represent significant "import-substitution". Import substitution occurs when a manufacturer or supplier of services provides products or services to a local customer base which currently has to purchase those products or services from outside of the area.

More specifically, New Mexico municipal IRB legislation specifically identifies "projects" as land, buildings, equipment and improvements which are suitable for use by any of the following:

1. any business in which all or part of the activities of the business involve the supplying of services to the general public or to governmental agencies or to a specific industry or customer but does not include establishments primarily engaged in the sale of goods or commodities at retail;

The IRB application, as shown in Exhibit 1 provides details of the Project and the number and types of jobs to be created.

This project includes a fiscal impact analysis prepared by the University of New Mexico's Bureau of Business and Economic Research (BBER). The fiscal impact determination of the Project is from information the Company provided. The analysis shows that the company will be

making a substantive contribution to the community, and that the City could realize a positive tax benefit with this project over the life of the bonds.

The project plan as shown in Exhibit 2 provides details of the project.

#### **FINDINGS:**

- 1. IRB 25-1 is a qualified project as defined by the State's Industrial Revenue Bond Act and the City enabling legislation (Resolution R-196, Sixth Council (126-1985) as amended by Resolution 350 Sixth Council; and
- 2. IRB 25-1 would make positive substantive contributions to the local economy and community by creating 100 high-wage economic base jobs; and
- 3. IRB 25-1 will continue Albuquerque's position in the forefront of alternative energy research and development; and
- 4. IRB 25-1 would comply with the adopted City plans and policies, and meet community economic development priorities and objectives;
- 5. IRB 25-1 would adequately meet the evaluation criteria established by the City for Industrial Revenue Bond Act projects, including the requirement that the City recoup the value of its investment over the term of the bonds.

**PROJECT ANALYSIS:** The project, as proposed in the project application, will be analyzed in accordance with the City's IRB project evaluation criteria.

#### I. INITIAL QUALIFYING TEST; PASS/FAIL CRITERIA

1.Economic Base Company * that meets statutory requirements	Pass
2. Satisfactory initial demonstration of ability to service debt or	Pass
self-fund purchase of the bonds, or evidence of an acceptable	
financing commitment.	
3. Conforms to City planning and zoning policies.	Pass
4. Firm has no outstanding substantive federal, state or local tax	Pass
issues.	
5. Proposed project complies with all federal, state, and local	Pass
environmental laws, regulations, and rules.	
6. Jobs created by the project meet or exceed the median wage for	Pass
similar jobs in the community	
7. Per state requirements, the firm covers 50% of health insurance	Pass
premiums for employees.	
8. Other additional factors.	
RESULT	PASS

- 1. Kairos Power's revenue sources are to out-of-state entities and investors. Kairos also qualifies under the IRB Act and the City's Ordinance as:
- a. "any business in which all or part of the activities of the business involve the supplying of services to the general public or to government agencies or to a specific industry or customer base but does not include establishments primarily engaged in the sale of goods or services at retail."
- 2. The bonds will be considered a "self-purchase"-- purchased by a subsidiary or affiliate of the Company.
- 3. The site is zoned PC for Planned Community at Mesa Del Sol and conforms to City planning and zoning policies. This Project includes an existing manufacturing facility. Additional information is contained below in Sections II-1 and II-2.
- 4. Kairos has certified that it has no outstanding substantive federal, state, or local tax issues.
- 5. The Project, in its design, complies with environmental regulations. Permits are required for the renovations and new developments. Additional information regarding environmental implications is contained in the following section and in the Project Plan.
- 6. Jobs for the positions meet or exceed the median wages for similar jobs in the community. The salaries and positions are more fully described in Section II-7 and in the Application.
- 7. Kairos pays at least 50% percent of the health and dental insurance premiums for its employees (the company pays 100%).

#### II. LAND USE, PLAN AND DESIGN ELEMENTS

1. PLAN & ZONING:

#### Legal Description

The legal description of the site, where Kairos currently has operations, consists of the following:

☐ Lot D-1, 16.4161 Acres

TR D-1 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATION PARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATION PARK II)

☐ Lot D-2, 3.7660 Acres

TR D-2 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATION PARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATION PARK II)

☐ Lot D-3 / Schott Building, 12.0217 Acres

TR D-3 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATION PARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATION PARK II)

#### **Prevailing Site Conditions**

The property consists of three contiguous parcels with an existing manufacturing building that is approximately 113,000 square feet in area.

#### Present Assessed Value

The current 2023 assessed property values shown in the table below were pulled from the Bernalillo County Assessor Property Search Portal.

Parcel	Description	Total Full Value	Net Taxable Value
TR D-1	16.4161 Acres	\$1,138,400	\$379,429
TR D-2	3.7660 Acres	\$318,600	\$106,822
TR D-3	12.0217 Acres / Kairos Building	\$14,608,009	\$4,868,849

#### Present and Proposed Zoning

The site is currently in an IDO Zone District with designation PC (Planned Community).

No changes will be required for the proposed use.

As stated in the IDO, the purpose of the Planned Community District—Employment Center zoning district is to accommodate very large scale residential or mixed use-communities. A wide variety of non-residential uses include a wide variety of office, commercial research, light industrial, manufacturing, office, research and development, distribution, showroom, processing, and institutional uses.

#### 2. LAND USE:

The site for the Project will be on Kairos's existing property, where the expansion project is focused on development and construction on the west side of campus. Kairos will not be acquiring additional land for the expansion.

Current plans for 2024 through 2028 include the construction of a Salt Production Facility, which will use Kairos's proprietary chemical manufacturing process in order to produce fluoride salt, which will be used as a primary heat transfer fluid in Kairos's KP-FHR technology. Additionally, Kairos plans to construct two fuel development lab facilities at the existing site, which would focus on prototyping in design-build-test cycles in order to advance its fuel production capabilities.

The impact on existing industry and commerce after construction is anticipated to be favorable.

It is important to note that nuclear material will not be utilized on site.

The proposed operations will not generate any notable air, noise, or waste pollution. Given the modest proposed employment level and focus on research and development rather than on manufacturing, there will not be significant employee or truck traffic associated with the project. From time-to-time large pieces of testing equipment will be shipped in for installation, particularly during facility construction.

#### D. <u>Competition</u>

The research and technology development to be conducted by Kairos Power in Albuquerque is extraordinarily unique with few competitors globally and none locally or even in the state of New Mexico. There are some research synergies with the National Labs in the area.

#### E. Effect on Existing Industry and Commerce during and after Construction

Kairos expect to have both construction contracts and equipment contracts. Once the additional facilities are fully operational, approximately 100 full-time operator, engineer, fabricator, machinists, and R&D jobs will be created. Given the nature of the proposed testing operations, significant quantities of electricity and natural gas will be utilized, resulting in an increase of local purchases from PNM and NMGCO.

More detail is provided in the fiscal impact analysis.

The project would support: a) An Economic Development Strategy for Albuquerque/Bernalillo County to attract, develop, and retain responsible and responsive businesses; nourish expansion of existing and new local businesses; and emphasize economic base companies; and b) The Comprehensive Plan Economic Development Policies to: encourage expansion of export-based business to customers across the country that strengthen the economy; encourage prospective employers willing to hire local residents and able to diversify the employment base; development of local business enterprises as well as the recruitment of outside firms. The project also supports the economic development priorities and objectives of the City's Local Economic Development Act.

The Kairos Power Project further supports the Economic Development Department's criteria for the use of incentives by Leveraging our Core Assets, Implementing Place-Based Strategies (by occupying a large existing mostly vacant office building and surrounding areas in a designated Employment Center), Supporting Focused and Positive ROI Projects, and creating 100 high-paying Economic Base jobs.

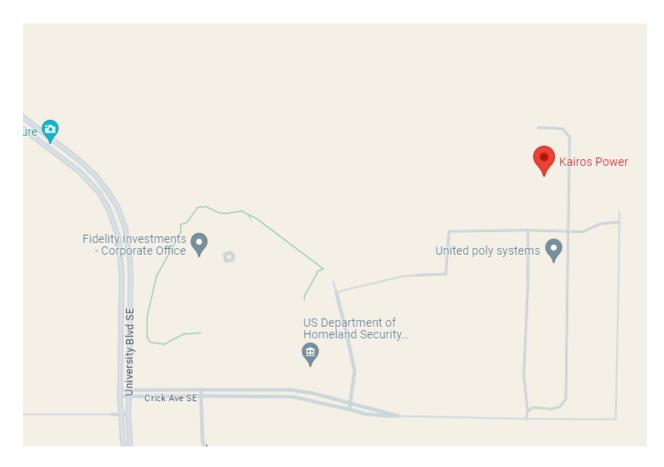
#### 3. INFILL:

Most infrastructure, parking and utilities are already developed. Kairos previously installed a new water line and new water meter to allow its water usage to be tracked separately from the neighboring property's use. For this expansion project, Kairos expects no significant water, sewer or road infrastructure improvements will be required. A map of the area is included. From a community development perspective, PNM will be able to utilize the significant electric

requirements of the project as the basis for making substantial upgrades to the electrical infrastructure in Mesa del Sol, supporting future growth and development in the area. This project will share in the cost of the substation through an initial up-front capital contribution as well as an investment credit recovered through the electric rate. PNM will absorb a large portion of the cost as part of general infrastructure improvements required to support anticipated growth in the area.



IRB 25-1: Kairos Power LLC Project



#### 4. DESIGN AND CONSERVATION:

The facility is an existing area designed as an employment center. No historic properties are involved.

No individuals, families, or businesses will be displaced by the activities outlined in this plan. The project is to be located within an existing manufacturing facility.

Kairos's engineering team is currently reviewing means to reduce water consumption through use of alternative cooling technologies and recirculation of cooling water. The company fully expects to be able to utilize water from the nearby water reuse (purple) line for all water needs other than the potable water required for the facility.

The overall design of the Salt Production Facility along the two fuel development lab facilities will be planned to integrate well into the Mesa del Sol development and will adhere to requirements of the development to ensure it contributes positively to the overall image of the area.

#### 5. RENEWABLE ENERGY:

The Company will not create or produce renewable energy from the facility. The site's energy needs are supplied by PNM, and Kairos will utilize renewable energy to the extent it is part of PNM's energy portfolio..

#### III. ECONOMIC BENEFITS

#### 6. COMPETITION:

The research and technology development to be conducted by Kairos Power in Albuquerque is extraordinarily unique with few competitors globally and none locally or even in the state of New Mexico. There are some research synergies with the National Labs in the area.

#### 7. JOBS:

The salaries for the jobs profiled meet or exceed the average for similar positions within the community.

M. Number and Types of Jobs Created
The anticipated new job employment ramp-up schedule is shown in the table below:

Job Title	2024	2025	2026	2027	2028	Total	Est Salary 2024	Est Salary 2025	Est Salary 2026	Est Salary 2027	Est Salary 2028
Operator	2	7	6	3	-	18	73,000	75,190	77,446	79,769	82,162
Tech Coordinator	1			- 2		1	73,900	76,117	78,401	80,753	83,175
QA Lead Role	1		-	7/3	-	1	69,500	71,585	73,733	75,945	78,223
Day Lab Chemist	2		-	-		2	89,700	92,391	95,163	98,018	100,958
Maintenance Coordinator		1	-	-	-	1	47,100	48,513	49,968	51,467	53,011
PDL Operator		1		-		1	77,670	80,000	82,400	84,872	87,418
CDL CVD Engineer	1			-	-	1	150,000	154,500	159,135	163,909	168,826
WMLTest Engineer	1		-	-		1	130,000	135,900	137,917	142,055	146,316
I&C Engineer			1	-		1	130,000	133,900	137,917	142,055	146,316
TDL Automation Engineer	1		-	-		1	150,000	154,500	159,135	163,909	168,826
KDL Test Engineer		1		*		1	125,214	130,000	133,900	137,917	142,055
TDL Technologist	-	3		-	-	3	77,670	80,000	82,400	84,872	87,418
KDL Operator		1	-			1	77,670	80,000	82,400	84,872	87,418
CDL Operator	-	1		-		1	77,670	80,000	82,400	84,872	87,418
WML Operator		1	-	-		1	77,670	80,000	82,400	84,872	87,418
Fuels Fellow		1	-	-		1	194,175	200,000	206,000	212,180	218,545
Characterization Lead	1		-	-		1	102,000	105,060	108,212	111,458	114,802
Characterization Tech		2				2	72,816	75,000	77,250	79,568	81,955
SPF Manufacturing - Accelerated Fabricator Onboarding	2		-	1	-	3	95,000	97,850	100,786	103,809	106,923
Fabricators	2	2	2	2	2	10	95,000	97,850	100,786	103,809	106,923
Machinists	2	2	2	5	2	13	97,500	100,425	103,438	106,541	109,737
Quality Control Technician	2	1	1	1	1	6	100,000	103,000	106,090	109,273	112,551
Planners	2	- 24				2	90,000	92,700	95,481	98,345	101,296
Machine Operator	2		-			2	75,000	77,250	79,568	81,955	84,413
Leader CatchAll (Supervisor, Managers, Director)	3		1	- 2		4	175,000	180,250	185,658	191,227	196,964
Helpers	1	1	1	3		- 6	45,400	47,792	49,226	50,703	52,224
Mechanical Technologist (Mod Skid)	-	3	3	-		6	74,100	76,323	78,613	80,971	83,400
Construction Manager	1		1	-		2	85,300	87,859	90,495	93,210	96,006
Engineer	1		1	-		2	95,600	98,468	101,422	104,465	107,599
Process Pippling Quality Assurance	1	1	-	-		2	50,800	52,324	53,894	55,511	57,176
Construction Procurement Specialist	1		-	-	-	1	98,000	100,940	103,968	107,087	110,300
Reviewing design(s)		1	1			2	69,500	71,585	73,733	75,945	78,223
Total	30	30	20	15	5	100					

1) What percentage of the permanent new jobs is expected to be filled by current Albuquerque area residents, as opposed to people relocated from elsewhere?

Albuquerque is uniquely positioned to provide professionals with the specialized skills and knowledge required for the proposed expanded operations. However, given the rapid ramp-up and nationwide competition for the engineering skills required for the project, it may not be possible to hire all of the required staff locally, though the company will certainly make every effort to do so. It is estimated that from the 100 new jobs, 45% likely will move in from out of state.

2) Will jobs benefit low and moderate income residents?

All positions will be made available to all qualified applicants.

3) Will the jobs meet or exceed median wages for the industry within the community?

Yes. The new jobs are expected to have an average salary above \$100k.

4) Will the jobs match skills of current city residents?

Yes. Part of the appeal of Albuquerque for this project is the skill set present in the region with the university, the national labs, and other major technology companies.

5) Will new employees be trained to fill the positions?

Yes. The company is anticipating it will utilize the Job Training Incentive Program and is looking to spearhead a consortium focused on key technical skills relevant to Kairos Power, the national labs, other interested companies, and educational institutions (CNM, NMSU, UNM, and NM Tech) in the area.

6) What stated advancement opportunities are there?

Kairos Power fully supports advancement from within. As a growing, entrepreneurial business, there are ample opportunities for team members who wish to advance to do so, either in management or through leadership of technical teams.

7) Will "Job Training Incentive Program" or other job training programs be used?

Yes

8) Will at least 50% of health insurance premiums be covered for employees?

Yes. The company pays for 100% employee's premiums for medical, dental, and vision coverage.

#### 8 <u>Local Purchasing</u>

Estimated local purchases of goods and services other than utility services are expected to be negligible. Given the nature of the proposed testing operations, significant quantities of electricity and natural gas will be utilized, resulting in an increase of local purchases from PNM and NMGCO.

Year	Electric	Natural Gas	Water	Wastewater	Solid Waste
2024	\$600,000	\$79,482	\$98,223	\$67,712	\$7,970
2025	\$800,000	\$90,836	\$122,779	\$77,385	\$9,962
2026	\$900,000	\$102,191	\$147,335	\$87,058	\$11,954
2027	\$1,000,000	\$102,191	\$171,890	\$87,058	\$11,954
2028	\$1,000,000	\$102,191	\$196,446	\$87,058	\$11,954

Estimates of annual utility expenditures are shown in the table below and reflect the planned operational ramp-up along with the assumption of a 5-year economic development rate in effect for electric service (undiscounted total shown in 2028). Because future increases are difficult to predict, Kairos has erred on the side of a conservative estimate and not applied any annual increase in the applicable base rates.

In addition to the substantial utility purchases shown above, the company utilizes local companies for services such as groundskeeping and facility maintenance, janitorial, equipment maintenance, and security. Miscellaneous office and facilities supplies will also likely be purchased locally.

#### IV. PROJECT FEASIBILITY

9. COST/ FEASIBILITY/ FINANCING: Cost of Improvements, Bond Amount and Private Financing

A summary of the project is as follows:

#### **Cost of Improvements**

- Land \$0 (existing site)
- Building and Other Real Property Improvements \$92M
- Equipment, Furniture, & Fixtures \$208M
- Infrastructure \$0 (no estimated included at this time)

**Bond Amount -** Kairos is requesting its existing self-funded IRB to be extended and increased in the amount of \$300,000,000.

#### **Project Financing**

Financing for the project will come from two sources: the company's award from the U.S. Department of Energy under the Advanced Reactor Demonstration Program (ARDP) and existing private investors.

The Project application includes a letter from Kairos's Vice President of Financial Operations, Linda Schenk, that outlines the finance plan for the project.

As stated above, the Company intends to spend approximately \$92 million in new building construction and other real estate improvements.

Funding is subject to City Council approval. Kairos Power intends to self-fund the improvements through their own working capital, and they are responsible for their own and the City's fees related to the IRB application and associated legal or other administrative fees, including the fiscal impact analysis.

#### 10. DEVELOPER'S RECORD:

Kairos Power Inc. was founded in 2016 and is headquartered in Alameda, California, in the San Francisco Bay area, and currently has about 100+ employees.

Kairos is a Delaware limited liability company registered to do business in New Mexico. Kairos was founded in 2016 and is based in the San Francisco Bay area. The company currently has approximately 400 employees company-wide, including 113 employees in New Mexico. Kairos is privately funded but has received a significant award from the U.S. Department of Energy, which recognizes the importance of Kairos's technology to the country's clean energy goals.

Brief summaries of the relevant experience of the three co-founders of Kairos Power are included below and their resumes are attached to the Application. Additional information about other key individuals with the company can be found on the company's website.

#### Michael Laufer, Co-Founder and Chief Executive Officer

Dr. Michael Laufer is the Co-Founder & CEO of Kairos. In this role, Dr. Laufer is responsible for high level strategy and operations within the company for Kairos's design, development, and commercialization of KP-FHR technology.

Prior to co-founding Kairos, Dr. Laufer was a postdoctoral scholar at the University of California, Berkeley where his research included work in reactor safety, design, licensing, and code validation for advanced non-light water reactors. His technical expertise includes experimental and discrete-element simulation methods for granular flows relevant to pebble-bed nuclear reactors.

Dr. Laufer graduated from Stanford University with a B.S. in Mechanical Engineering with Honors in International Security Studies. He received his Ph.D. in Nuclear Engineering from the University of California, Berkeley.

#### Edward Blandford, Co-Founder and Chief Technology Officer

Dr. Edward Blandford is a Co-Founder & CTO of Kairos Power. He is responsible for technology development, experimental testing, modeling and simulation, and licensing activities at Kairos Power.

Prior to co-founding Kairos Power, he was at the University of New Mexico where he was an assistant professor in the Department of Nuclear Engineering. Dr. Blandford was also a Stanton Nuclear Security Fellow at the Center for International Security and Cooperation at Stanford University. He also worked for several years as a project manager at the Electric Power Research Institute focusing on steam generator thermal-hydraulics and material degradation management.

Dr. Blandford has a B.S. in Mechanical Engineering from University of California, Los Angeles and a M.S. and Ph.D. in Nuclear Engineering from the University of California, Berkeley.

#### Per Peterson, Co-Founder and Chief Nuclear Officer

Dr. Per Peterson is a Co-Founder & Chief Nuclear Officer of Kairos. Dr. Peterson also holds the William and Jean McCallum Floyd Chair in the Department of Nuclear Engineering at the University of California, Berkeley.

Dr. Peterson is an expert in topics related to high-temperature fission energy systems, safety and security of nuclear materials, and waste management. As a member of the Evaluation Methodology Group, he participated in the development of the Gen IV Roadmap while serving as co-chair for the Proliferation Resistance and Physical Protection Working Group. His research has contributed to the development of the passive safety systems used in the General Electric ESBWR and Westinghouse AP1000 reactor designs. With Charles Forsberg and Paul Pickard, in 2003, he proposed the FHR concept of a molten-salt cooled, solid fueled reactor.

Dr. Peterson graduated from the University of Nevada at Reno with a B.S. in Mechanical Engineering. He holds an M.S. and Ph.D. in Mechanical Engineering from the University of California, Berkeley. The Kairos Power FHR (KP-FHR) is a novel advanced reactor technology that leverages TRISO fuel in pebble form combined with a low-pressure fluoride salt coolant. The technology uses an efficient and flexible steam cycle to convert heat from fission into electricity and to complement renewable energy sources.

Kairos Power is among a select group of companies working with the U.S. Department of Energy and others to advance and transform the nuclear power landscape and safety discussion. Examples of recent company news and developments are include below.

#### **JULY 2024**

#### Kairos Power Begins Construction on Hermes Low-Power Demonstration Reactor

Kairos Power has started construction on the Hermes Low-Power Demonstration Reactor, the first and only Gen IV reactor to be approved for construction by the U.S. Nuclear Regulatory Commission and the first non-light-water reactor to be permitted in the U.S. in over 50 years.

#### FEBRUARY 2024

## U.S. Department of Energy and Kairos Power Execute Novel Performance-Based, Fixed-Price Milestone Contract

The U.S. Department of Energy (DOE) and Kairos Power have signed a Technology Investment Agreement to implement an Advanced Reactor Demonstration Program (ARDP) risk reduction award, for which the company was selected in Dec. 2020, to support the design, construction, and commissioning of the Hermes demonstration reactor in Oak Ridge, Tenn.

Additional information is available on <u>www.kairospower.com</u>.

#### 11. EQUITY:

The project intends to utilize \$300 million of industrial revenue bonds, which will be self-purchased for this project. Financing for the project will come from two sources: the company's award from the U.S. Department of Energy under the Advanced Reactor Demonstration Program (ARDP) and existing private investors.

Based on financial information provided and previous success, the Company appears capable of managing and completing the Project.

#### 12. MANAGEMENT:

Kairos Power will develop their management team for the site. Biographies of other Company senior personnel are attached in the Application.

Based on the description given in the project plan, management appears to be qualified to manage the project.

#### 13. FISCAL IMPACT ANALYSIS

This Project includes an impact analysis prepared by the University of New Mexico's Bureau of Business and Economic Research (BBER) as required given the project is a recipient of City funds.

The fiscal impact analysis demonstrates that the City will recoup the value of its investment within the term of the bonds.

#### **FINDINGS:**

- 1. IRB 25-1 is a qualified project as defined by the State's Industrial Revenue Bond Act and the City enabling legislation (Resolution R-196, Sixth Council (126-1985) as amended by Resolution 350 Sixth Council; and
- 2. IRB 25-1 would make positive substantive contributions to the local economy and community by creating 100 high-wage economic base jobs; and
- 3. IRB 25-1 will continue Albuquerque's position in the forefront of alternative energy research and development; and
- 4. IRB 25-1 would comply with the adopted City plans and policies, and meet community economic development priorities and objectives;
- 5. IRB 25-1 would adequately meet the evaluation criteria established by the City for Industrial Revenue Bond Act projects, including the requirement that the City recoup the value of its investment over the term of the bonds.

#### STAFF RECOMMENDATION:

Based on the above findings, staff recommends approval of IRB 25-1 as proposed in the project plan application.

Max Gruner, Director Economic Development Department

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# Fiscal Impact Analysis of Proposed Kairos Project (Project Maia) on the City of Albuquerque

Prepared for the City of Albuquerque Economic Development Department

Alexis P. Amodio-Cardwell

**JULY 2024** 



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### Introduction

The Economic Development Department at the City of Albuquerque (the City) has requested that UNM's Bureau of Business and Economic Research (UNM BBER) conduct a fiscal impact analysis regarding an industrial revenue bond (IRB) application submitted by Kairos Power, LLC ("Kairos"). The current project name is titled "Project Maia." Established in 2016, Kairos is committed to providing a clean, affordable, and safe energy solution through the integrated design, licensing, and demonstration of advanced nuclear reactor technology.<sup>1</sup>

Kairos plans to expand its Albuquerque campus at 5201 Hawking Drive in the Mesa del Sol development by building a Salt Production Facility and two fuel development lab facilities. These developments will support the construction of a demonstrator reactor that Kairos will build in Oak Ridge, Tennessee, as part of the U.S. Department of Energy's Advanced Reactor Demonstration Program.

Kairos is requesting a \$300 million bond from the City. In addition, Kairos is seeking a 100% abatement of all gross receipts and compensating taxes on purchases of eligible tangible personal property acquired in connection with Project Maia, as well as an 85% real and personal property tax abatement for the site. By the end of 2028, the expansion is estimated to create at least 100 full-time jobs.

## **Property**

As mentioned in the introduction, Project Maia will be located on the west side of Kairos' current campus in the Mesa del Sol development. Legal descriptions of the site have been provided by Kairos using the 2023 Bernalillo County Assessor Property Search Portal, but a notice of value had not been provided, so it could not be verified with the Office of the Bernalillo County Tax Assessor.<sup>2</sup>

- Parcel TR D-1, 16.4161 Acres
   TR D-1 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATION PARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATION PARK II)
- Parcel TR D-2, 3.7660 Acres
   TR D-2 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATION PARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATION PARK II)
- Parcel TR D-3 / Schott Building, 12.0217 Acres
   TR D-3 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATION PARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATION PARK II)

## Data and Methods

<sup>&</sup>lt;sup>1</sup> https://kairospower.com/

<sup>&</sup>lt;sup>2</sup> According to Kairos, Kairos had not received a Notice of Valuation from the Bernalillo County Tax Assessor, since the three parcels were conveyed to the City in connection with the existing 2020 IRB.



This analysis is based on self-reported budget and expenditures information provided by Kairos representatives. The figures submitted in the IRB application to the City have also been taken into account. Given that Kairos is seeking a 20-year bond rate, data includes expected payroll and employment figures, operational spending, and capital expenditures over the next 20 years.

Employment data includes the creation of 100 new jobs from 2024 to 2028. Total compensation for these jobs, which includes salaries and benefits, ranges from \$64,589 to \$270,292. Kairos also plans to offer an average salary increase of 3% and a benefits fringe rate of 39.20%.

Kairos estimates that 40% of its spending will be within the state (with all of these purchases being subject to gross receipts taxes), and 60% will be made to out-of-state suppliers (with all of these purchases being subject to compensating taxes). Taxes for electricity and natural gas have also been considered in this analysis.

Moreover, Kairos anticipates that almost \$50 million will be allocated to building and other real property improvements, while the other \$250 million will be allocated to equipment, furniture, and fixtures for a total of \$300 million (the amount of the IRB). Additionally, Kairos expects construction to begin in late 2024, with the majority of construction being completed in 2026.

This analysis assesses the tax impact of Kairos' operations on the City of Albuquerque over the next 20 years, focusing on gross receipts, property, and other taxes. It includes the effects of spending related to direct, indirect, and induced jobs generated by Kairos operations, including construction. The analysis also incorporates the expected tax contributions from the industry.

Major assumptions were undertaken to complete this analysis, all of which are listed below:

- 1. Given the assumption that 55% of the company's employees will be hired locally, 45% of employees with specialized skills will come from outside of New Mexico, contributing to an increase in the City's population and generating costs for the City.
- 2. All construction jobs are expected to be sourced from within the city.
- 3. The fiscal impact assumes a 100% abatement of gross receipts and compensating taxes on purchases of eligible tangible personal property acquired in connection with Project Maia, as well as an 85% real and personal property tax abatement for the project site.
- 4. 55% of all full-time jobs are expected to be filled by New Mexico residents. This assumption has been extended to say that all 55% of the proposed jobs will be filled by Albuquerque residents.
- 5. Mesa del Sol is a Tax Increment Development District (TIDD), which is a special tax district created to help finance infrastructure investment. Given that Kairos will be expanding in the Mesa del Sol development, a portion of the City's share of the GRT and Real Property Tax will be remitted to the TIDD.
- 6. This analysis assumes that all employment resulting from this agreement including construction, research and development, and manufacturing activities will be a net gain to Albuquerque. Company spending is a net gain. The purchase of goods and services, real and personal properties, and construction expenditures are considered for gross receipt, compensating, and property taxes.
- 7. Only the City of Albuquerque incentives and the ensuing fiscal impact on the City are considered; incentives received from the State of New Mexico and/or any other governing entity are not included in this analysis.



- 8. Multipliers used for estimating the impacts of the project were based on historical budget information and the industry for which the impact was modeled NAICS 541700: Scientific Research and Development Services.
- 9. It is estimated that 40% of spending for Project Maia will be with in-state suppliers and 60% will be with out-of-state suppliers.
- 10. The facility will be engaged primarily in Research and Development. The sales of any goods manufactured at the facility will likely be to non-New Mexico customers; thus, Albuquerque will not generate any taxes in connection with the distribution of Kairos products manufactured at the Albuquerque facility.

## Results

The fiscal impact presented in Table 1 shows that operations related to the \$300 million bond will generate an estimated total of slightly over \$4 million in taxes upon reaching horizon in 2043.<sup>3</sup> The projected is expected to become tax positive in 2026 and will continue to remain positive throughout the span of the contract. Although Kairos will gradually ramp up to full capacity (100 new employees) by 2028, the jobs will generate a tax impact throughout the lifespan of the IRB and beyond. Moreover, the Mesa del Sol development will receive a positive share of tax revenue, reaching a total of \$26,453 by the end of the IRB period.

<sup>&</sup>lt;sup>3</sup> The \$4 million cumulative total is determined around the current 20-year general obligation bond rate of 3.68%.



# Table 1. IRB Analysis: Estimated Tax Revenues for Proposed Kairos, LLC Project (Project Maia), Including Incremental Tax, Present Value of City Taxes, TIDD Taxes, and Net Tax Increment, and Cumulative Net Present Value by Year (2024 dollars)

	Gross Receipts and Compensating Taxes Proper							Property Ta	x			TIDD Share						Foregone					Fiscal Impact		
	Company Employees	Indirect and Induced Employees	Company Purchases	Construction	Construction Employees	Utilities	Real (Company)	Personal (Company)	Real (Employees)	Other Taxes	Total Revenues	Construction GRT	GRT	Utilities GRT	Personal Property	Real Property Tax	TIDD Total	Real Property Tax	Personal Property Tax	GRT & CMP	City Costs	Annual	Present Value	Cumulative	
2024	6,694	22,976	5,609,653	734,156	180,296	6,345	124,338	354,538	6,535	448	7,045,978	307,042	310,167	3,125	261,740	61,241	633,148	105,687	301,357	6,850,253	4,766	(216,085)	(216,085)	(216,085)	
2025	13,466	42,883	2,865,993	224,586	58,372	8,319	146,992	531,411	13,070	896	3,905,989	99,407	103,504	4,097	261,740	72,399	437,643	124,943	451,700	3,991,437	9,532	(671,624)	(647,785)	(863,871)	
2026	18,322	58,332	1,833,188	61,593	11,994	9,359	147,066	461,937	17,427	1,194	2,620,411	20,426	25,036	4,609	227,521	72,436	324,992	125,006	392,646	299,825	12,710	1,790,224	1,665,395	801,525	
2027	21,820	70,357	1,672,145	51,836	10,604	10,292	146,290	405,464	20,695	1,418	2,410,922	18,058	23,127	5,069	199,706	72,053	294,887	124,347	344,644	525,294	15,093	1,401,544	1,257,540	2,059,064	
2028	21,418	76,639	722,890	27,647	7,996	10,292	144,121	320,962	21,784	1,493	1,355,242	13,617	18,687	5,069	158,086	70,985	247,758	122,503	272,818	130,283	15,887	813,752	704,226	2,763,290	
2029	19,537	78,938	-	-	-	-	138,093	231,096	21,784	1,493	490,941	-	-	-	113,823	68,016	181,840	117,379	196,432	-	15,887	161,242	134,587	2,897,877	
2030	20,123	81,306	-	-	-	-	132,066	141,230	21,784	1,493	398,002	-	-	-	69,561	65,047	134,608	112,256	120,046	-	15,887	149,813	120,609	3,018,486	
2031	20,070	83,746	-	-	-	-	126,038	51,364	21,784	1,493	304,495	-	-	-	25,299	62,079	87,377	107,133	43,659	-	15,887	137,815	107,012	3,125,498	
2032	20,351	86,258	-	-	-	-	120,011	12,146	21,784	1,493	262,043	-	-	-	5,982	59,110	65,092	102,009	10,324	-	15,887	133,822	100,223	3,225,721	
2033	20,962	88,846	-	-	-	-	113,983	5,431	21,784	1,493	252,499	-	-	-	2,675	56,141	58,816	96,886	4,617	-	15,887	135,109	97,595	3,323,317	
2034	21,591	91,511	-	-	-	-	107,956	671	21,784	1,493	245,005	-	-	-	330	53,172	53,503	91,762	570	-	15,887	136,785	95,299	3,418,616	
2035	22,239	94,256	-	-	-	-	101,928	-	21,784	1,493	241,700	-	-	-	-	50,203	50,203	86,639	-	-	15,887	139,173	93,521	3,512,137	
2036	21,638	97,084	-	-	-	-	95,901	-	21,784	1,493	237,899	-	-	-	-	47,235	47,235	81,516	-	-	15,887	140,496	91,059	3,603,196	
2037	20,344	99,997	-	-	-	-	89,873	-	21,784	1,493	233,490	-	-	-	-	44,266	44,266	76,392	-	-	15,887	141,211	88,274	3,691,470	
2038	15,747	102,378	-	-	-	-	83,846	-	21,784	1,493	225,247	-	-	-	-	41,297	41,297	71,269	-	-	15,887	138,091	83,260	3,774,730	
2039	15,568	104,831	-	-	-	-	77,818	-	21,784	1,493	221,493	-	-	-	-	38,328	38,328	66,146	-	-	15,887	139,460	81,101	3,855,831	
2040	15,762	107,357	-	-	-	-	71,791	-	21,784	1,493	218,186	-	-	-	-	35,360	35,360	61,022	-	-	15,887	141,277	79,241	3,935,072	
2041	16,235	109,959	-	-	-	-	65,763	-	21,784	1,493	215,233	-	-	-	-	32,391	32,391	55,899	-	-	15,887	143,447	77,603	4,012,675	
2042	16,584	112,639	-	-	-	-	59,736	-	21,784	1,493	212,236	-	-	-	-	29,422	29,422	50,775	-	-	15,887	145,573	75,958	4,088,633	
2043	17,082	115,400	-	-	-	-	53,708	-	21,784	1,493	209,466	-	-	-	-	26,453	26,453	45,652	-	-	15,887	147,927	74,446	4,163,079	

Gross Receipts Taxes, Company Employees: Gross receipts taxes on local purchases by new operating personnel employed by applicant

Gross Receipts Taxes, Indirect and Induced Employees: Gross receipts taxes on local spending by those supported by company's purchases of local goods and services and by spending by operating personnel.

Gross Receipts Taxes, Company Purchases: Gross receipts taxes on increased company purchases of local goods and services as a result of the project.

Gross Receipts Taxes, Company Sales: Only sales in-state generate gross receipts taxes.

Gross Receipts Taxes, Construction: Gross receipts taxes on contractor receipts and on local spending by construction workers and those supported indirectly by the project.

Other Revenues: Increased employment, resulting from the project, will increase Albuquerque's population and this new population will pay taxes and various City charges for services. Taxes include property tax operating and debt service levies. franchise fees, State-shared revenue distributions other than gross receipt, permits and charges for services, including rent on city properties.

Total Revenues: Gross receipt tax revenues and other revenues associated with the additional population resulting from the project.

Foregone Property Taxes: Property taxes that would have been paid on land, buildings and equipment financed by the IRB. Title to properties financed are held by the City and the properties are exempt from taxes during the life of the bond. There is a minimum Payment in Lieu of Taxes of 5% of the taxes foregone.

Foregone Sales Taxes: Gross receipts taxes that would have been owed on local equipment purchases in the absence of the IRB.

City Costs: Costs of providing City services and infrastructure to the additional population and additional employment supported by the project. Costs include general fund expenditures, the subsidy for Transit, city street fund expenditures and average spending over past 5 years in the City's Capital Acquisition less that supported by Federal funds or transfers. The cost of services provided by the city is split between businesses (based on employment) and residents (based on additional population).

Fiscal Impact, Annual: The annual fiscal impact is the total revenue less the cost for each year of the Industrial Revenue Bond.

Fiscal Impact, Present Value: Present value of the stream of annual net fiscal impacts disounted to current values. Here the discount rate is the real rate of interest on GO bonds.

Fiscal Impact, Cumulative: The running total of state present value fiscal impacts over the life of the Industrial Revenue Bond, where the last year is the net present value of the Industrial Revenue Bond.

Company Purchases includes employer paid health care insurance as well as G&S expenditures.

Property Tax includes Real and Personal property for applicant and employees.