

**ALBUQUERQUE DEVELOPMENT COMMISSION  
Local Economic Development Act Hearing**

**September 7, 2024**

Case #2024-11

**LEDA-19-4:** Kairos Power, LLC. Project

**REQUEST:** Approving an Ordinance for Kairos Power, LLC Pursuant to the Local Economic Development Act

**PROJECT SUMMARY:** Kairos Power, LLC (“Kairos”), 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.

Kairos Power, LLC, a limited liability company registered to do business in New Mexico, is seeking the City of Albuquerque to be the fiscal agent for State LEDA funds and for the City to directly provide LEDA funds to be used for the construction of a Salt Production facility (the “Project”). Kairos is seeking LEDA funding in the amount of \$3,500,000. The State has agreed to provide \$3,000,000 and the City proposes to provide \$500,000. Kairos will be eligible for reimbursement for costs of the renovation, expansion and improvement incurred following execution of the Project Participation Agreement (“PPA”). (The Company also is requesting assistance as an Industrial Revenue Bond—IRB—Project, but that was considered separately at a previous meeting.)

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.*

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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 jobs average over \$100,000.

The company anticipates utilizing 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 Project is also expected to create approximately 74 indirect and induced jobs. Additionally, the Project will lead to the creation of 646 construction jobs sourced from local labor pools, as much as possible.

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. Qualifying entities for these projects include:

**A corporation, limited liability company, partnership, joint venture, syndicate, association or other person that is one or a combination of two (2) or more of the following:**

**A. A business in which all or part of the activities of the business involves the supplying of services to the general public or to governmental agencies or to a specific industry or customer, but, other than as provided in paragraph E. of this subsection, not including businesses primarily engaged in the sale of goods or commodities at retail;**

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

Exhibit 2 delineates the required Project Participation Agreement ("PPA") between Kairos Power, LLC and the City. The PPA is summarized in Section V.

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 next ten years. The source of specific benefits and costs are provided in greater detail for each taxing district on subsequent pages. Overall, the City will

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receive approximately \$12,640,245 in net benefits over the 10-year period, equating to a Present Value of \$10,961,114. The Project will have an estimated Economic Impact of \$ 478,683,751 and an overall Net Benefit of \$17,181,539 over the 10-year period.

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

### **FINDINGS:**

1. LEDA 25-3 is a qualified project as defined by the State’s Local Economic Development Act and the City enabling legislation (F/S O-04-10); and
2. LEDA 25-3 would make positive substantive contributions to the local economy and community by creating 100 high-wage economic base jobs; and
3. Subject to the development of acceptable Security documents, LEDA 25-3 would comply with the adopted City plans and policies, and meet community economic development priorities and objectives, including remaining in operation for ten years; and
4. Subject to the development of acceptable Security documents, LEDA 25-3 would adequately meet the evaluation criteria established by the City for Local Economic Development Act projects, including the requirement that the City recoup the value of its investment within ten years.

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

### **I. PROJECT ELIGIBILITY**

#### **1. QUALIFYING ENTITY**

City enabling legislation (F/S O-04-10), as well as the State Local Economic Development Act, establishes a definition for a “Qualifying Entity” eligible for LEDA funding assistance. Kairos Power Inc. qualifies under the Act and the Ordinance by meeting the following definition:

**As stated in the Summary, qualifying entities for these projects include**

**A corporation, limited liability company, partnership, joint venture, syndicate, association or other person that is one or a combination of two (2) or more of the following:**

**A. A business in which all or part of the activities of the business involves the supplying of services to the general public or to governmental agencies or to a specific industry or customer, but, other than as provided in paragraph E. of this subsection, not including businesses primarily engaged in the sale of goods or commodities at retail;**

2. ECONOMIC DEVELOPMENT POLICIES AND OBJECTIVES

The City’s enabling legislation also states that applications for LEDA assistance, which meet the policies and objectives of the City’s community economic development plans, shall receive priority. Kairos Power qualifies as the type of project that meets the City’s identified economic development priorities under (F/S O-04-10) in the following categories:

- (2) Private companies seeking to build, expand or relocate facilities;**
- (4) Projects in industry clusters listed above are particularly encouraged,**

II. LAND USE, PLAN AND DESIGN ELEMENTS

1. PLAN & ZONING:

Legal Description

The proposed property is at 5201 Hawking Dr SE, Albuquerque, NM 87106 and adjacent vacant parcels. Legal descriptions are below:

*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)

5201 Hawking DR SE, Albuquerque NM 87106

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.

<b>Parcel</b>	<b>Description</b>	<b>Total Full Value</b>	<b>Net Taxable Value</b>
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. 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.

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.

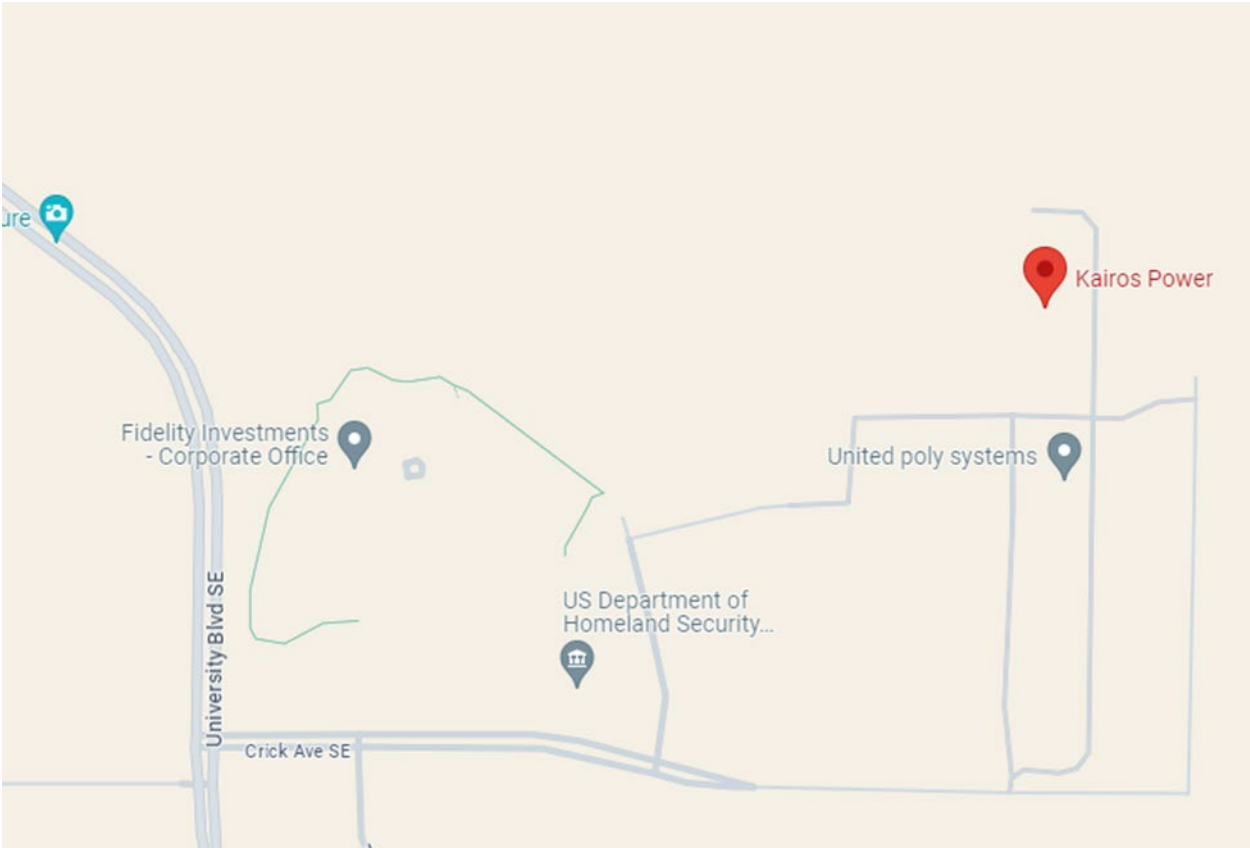
The project would support: a) An Economic Development Strategy for Albuquerque/Bernalillo County to attract, develop, and retain responsible and responsive businesses; nourish expansion of existing and new local businesses; and emphasize economic base companies; and b) The Comprehensive Plan Economic 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.

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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.

The anticipated new job employment ramp-up schedule is shown in the table below:



LEDA 25-3: Kairos Power LLC Project

Job Title	Year 1	Avg Salary	Year 1 Salary	Year 2	Avg Salary	Year 2 Salary	Year 3	Avg Salary	Year 3 Salary	Year 4	Avg Salary	Year 4 Salary	Year 5	Avg Salary	Year 5 Salary	Total
Operator	2	73,000	146,000	7	75,190	526,330	6	77,446	464,674	3	79,769	239,307	-	82,162	-	18
Tech Coordinator	1	73,900	73,900	-	76,117	-	-	78,401	-	-	80,753	-	-	83,175	-	1
QA Lead Role	1	69,500	69,500	-	71,585	-	-	73,733	-	-	75,945	-	-	78,223	-	1
Day Lab Chemist	2	89,700	179,400	-	92,391	-	-	95,163	-	-	98,018	-	-	100,958	-	2
Maintenance Coordinator	-	47,100	-	1	48,513	48,513	-	49,968	-	-	51,467	-	-	53,011	-	1
PDI Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
CDL CVD Engineer	1	150,000	150,000	-	154,500	-	-	159,135	-	-	163,909	-	-	168,826	-	1
WML Test Engineer	1	130,000	130,000	-	133,900	-	-	137,917	-	-	142,055	-	-	146,316	-	1
I&C Engineer	-	130,000	-	-	133,900	-	1	137,917	137,917	-	142,055	-	-	146,316	-	1
TDL Automation Engineer	1	150,000	150,000	-	154,500	-	-	159,135	-	-	163,909	-	-	168,826	-	1
KDL Test Engineer	-	126,214	-	1	130,000	130,000	-	133,900	-	-	137,917	-	-	142,055	-	1
TDL Technologist	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
TDL Technologist	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
TDL Technologist	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
KDL Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
CDL Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
WML Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
Fuels Fellow	-	194,175	-	1	200,000	200,000	-	206,000	-	-	212,180	-	-	218,545	-	1
Characterization Lead	1	102,000	102,000	-	105,060	-	-	108,212	-	-	111,458	-	-	114,802	-	1
Characterization Tech	-	72,816	-	1	75,000	75,000	-	77,250	-	-	79,568	-	-	81,955	-	1
Characterization Tech	-	72,816	-	1	75,000	75,000	-	77,250	-	-	79,568	-	-	81,955	-	1
SFF Manufacturing - Accelerated Fabricator Onboarding	2	95,000	190,000	-	97,850	-	-	100,786	-	1	103,809	103,809	-	106,923	-	3
Fabricators	2	95,000	190,000	2	97,850	195,700	2	100,786	201,571	2	103,809	207,618	2	106,923	213,847	10
Machinists	2	97,500	195,000	2	100,425	200,850	2	103,438	206,876	5	106,541	532,704	2	109,737	219,474	13
Quality Control Technician	2	100,000	200,000	1	103,000	103,000	1	106,090	106,090	1	109,273	109,273	1	112,551	112,551	6
Planners	2	90,000	180,000	-	92,700	-	-	95,481	-	-	98,345	-	-	101,296	-	2
Machine Operator	2	75,000	150,000	-	77,250	-	-	79,568	-	-	81,955	-	-	84,413	-	2
Leader CatchAll (Supervisor, Managers, Director)	3	175,000	525,000	-	180,250	-	1	185,658	185,658	-	191,227	-	-	196,964	-	4
Helpers	1	46,400	46,400	1	47,792	47,792	1	49,226	49,226	3	50,703	152,108	-	52,224	-	6
Mechanical Technologist (Mod Skid)	-	74,100	-	3	76,323	228,969	3	78,613	235,838	-	80,971	-	-	83,400	-	6
Construction Manager	1	85,300	85,300	-	87,859	-	1	90,495	90,495	-	93,210	-	-	96,006	-	2
Engineer	1	95,600	95,600	-	98,468	-	1	101,422	101,422	-	104,465	-	-	107,599	-	2
Process Piping Quality Assurance	1	50,800	50,800	-	52,324	52,324	-	53,894	-	-	55,511	-	-	57,176	-	2
Construction Procurement Specialist	1	98,000	98,000	-	100,940	-	-	103,968	-	-	107,087	-	-	110,300	-	1
Reviewing design(s)	-	69,500	-	1	71,585	71,585	1	73,733	73,733	-	75,945	-	-	78,223	-	2
<b>Total</b>	<b>30</b>		<b>3,006,900</b>	<b>30</b>		<b>2,515,063</b>	<b>20</b>		<b>1,853,498</b>	<b>15</b>		<b>1,344,819</b>	<b>5</b>		<b>545,872</b>	<b>100</b>

The Project is also expected to create approximately 74 indirect and induced jobs. Additionally, the Project will lead to the creation of 646 construction jobs sourced from local labor pools, as much as possible.

- 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 facility will have an average salary of approximately \$100,000.

- 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. In addition, the company pays for a majority of employee’s dependent(s) premiums—medical at 100%, dental and vision at 85%.

J. Local Purchasing

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.

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

As of now, Kairos is unable to estimate the future annual expenditure of goods and services procured locally that will be subject to New Mexico gross receipts tax. Kairos can share that approximately \$2.3M for FY2022 and FY2023 was paid in gross receipts tax on invoices providing goods or services to Kairos's location in New Mexico. This total does

not include FY2021 and FY2020 gross receipt tax paid.

#### **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**

- a. Land - \$0 (existing site)
- b. Building and Other Real Property Improvements - \$92M
- c. Equipment, Furniture, & Fixtures - \$208M
- d. 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 LEDA and IRB applications and associated legal or other administrative fees, including the fiscal impact analysis.

##### **10. DEVELOPER'S RECORD:**

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. 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 included 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 [www.kairospower.com](http://www.kairospower.com).

Based on the company's track record and the successful first phase of the project, the Company appears capable of managing and completing the Project.

11. EQUITY:

The project intends to utilize \$300 million of industrial revenue bonds, which will be self-purchased, and \$3.5 million of LEDA funds for this project.

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

12. MANAGEMENT:

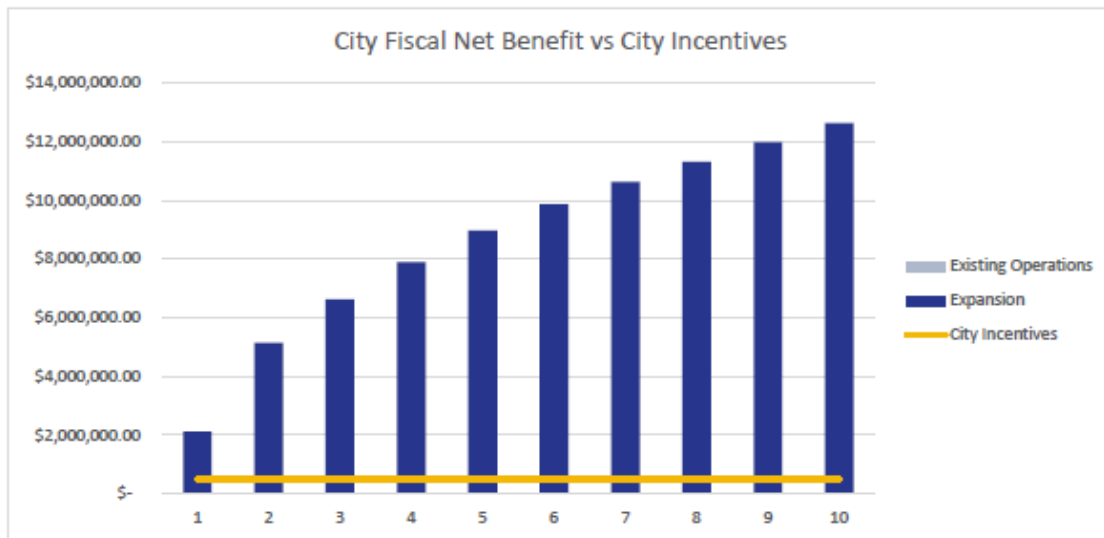
Kairos Power will develop their management team for the site. Resumes of Company senior personnel are attached in the Application.

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 Project will generate additional benefits and costs for local taxing districts, a summary of which is provided below. The source of specific benefits and costs are provided in greater detail for each taxing district on subsequent pages. Overall, the City will receive approximately \$12,640,245 in net benefits over the 10-year period, equating to a Present Value of \$10,961,114. The Project will have an estimated Economic Impact of \$ 478,683,751 and an overall Net Benefit of \$17,181,539 over the 10-year period.



#### Incentives

Total City Incentive:	\$	500,000
City Incentive Per Job:	\$	5,000

#### Combined Payback and Return

City Payback Period Combined:	0.24	Years
City Rate of Return Combined:	2092%	

#### Expansion Only Payback and Return

City Payback Period Expansion:	0.24	Years
City Rate of Return Expansion:	2092%	

**City Breakdown of Combined Benefits, Costs, and Net Benefits  
Over the Next 10 Years**

<b>Taxes and Revenue</b>	
Gross Receipt Taxes	\$ 4,981,057
Misc. Taxes and Revenue	\$ 514,686
Property Taxes	\$ 7,315,668
<b>Subtotal of Benefits</b>	<b>\$ 12,811,410</b>
<b>Costs</b>	
Costs	\$ 171,165
<b>Subtotal of Costs</b>	<b>\$ 171,165</b>
<b>Net Benefits</b>	
<b>Net Benefits</b>	<b>\$ 12,640,245</b>
<b>Present Value</b>	<b>\$ 10,961,114</b>

The fiscal impact analysis demonstrates that the City will recoup the value of its investment, within the ten years required by the LEDA ordinance.

## **V. PROJECT PARTICIPATION AGREEMENT**

Pursuant to the Local Economic Development Act, Sections 5-10-1 to 5-10-13 NMSA 1978 ("LEDA"), the City adopted Ordinance No. F/S 04-10 (the "LEDA Ordinance"), approving an economic development plan for the City and authorizing the City to consider applications for economic development assistance. The Ordinance calls for the preparation and approval of a Project Participation Agreement (PPA), which is the formal document, which states the contributions and obligations of all parties in the LEDA project. The agreement must clearly state the following items:

- (1) The economic development goals of the project;**
- (2) The contributions of the City and the qualifying entity;**
- (3) The specific measurable objectives upon which the performance review will be based;**
- (4) A schedule for project development and goal attainment;**
- (5) The security being offered for the City's investment;**
- (6) The procedures by which a project may be terminated and the City's investment recovered; and,**
- (7) The time period for which the City shall retain an interest in the project. Each project agreement shall have a "sunset" clause after which the City shall relinquish interest in and oversight of the project.**

**B. Each project participation agreement shall be adopted as an ordinance and adopted by the Council at a public hearing.**

The primary terms of the Kairos Power Project Participation Agreement are summarized and attached as an Exhibit.

1. COMPANY CONTRIBUTION

Kairos has undertaken certain renovations and improvements to the Project Facilities; and will occupy and operate the Project Facilities and will use the Project for advanced energy technology research and development; and will hire and retain employees as contemplated by this Agreement, all in accordance with the schedule and other terms and conditions set forth in this Agreement. Kairos will maintain the Project's operations in Albuquerque for a minimum of ten (10) years. Kairos will comply with all applicable laws in connection with the operation of the Project and will timely pay all applicable property taxes with respect thereto, taking into account the tax abatements afforded through the industrial revenue bond project contemporaneously entered into between the City and Kairos.

The State Contributions; Procedure for Disbursement of the State Contributions. The City anticipates that the State Contribution of \$3,000,000 will be delivered to the City for subsequent disbursement to Kairos, following enactment of the Kairos LEDA ordinance and execution of this Agreement and an intergovernmental agreement between the State and the City. The City will submit an invoice to the State and request transfer of the State funds. Upon receipt, the City will place the State Contribution into a separate account established in connection with the Project, as required by law. If, and only if, the City receives the State Contribution, the City will disburse the State Contribution to Kairos in the manner described in this Agreement. The State Contribution will be distributed to Kairos upon reaching the following benchmarks.

A. \$2,000,000 will be distributed upon the City's passage of the Project Ordinance and receipt of the Certificate of Occupancy for the Project Facilities, incurrence of LEDA eligible expenses and Kairos being current with all required reporting under this Agreement.

B. \$500,000 will be distributed upon Kairos hiring 30 full-time employees, for a total of 164 employees, which employment is maintained for one quarterly reporting period, incurrence of LEDA eligible expenses and Kairos being current with all required reporting under this Agreement.

C. \$500,000 will be distributed upon Kairos hiring 79 full-time employees, for a total of 234 employees, which employment is maintained for one quarterly reporting period, incurrence of LEDA eligible expenses and Kairos being current with all required reporting under this Agreement.

Pursuant to Section 11, reimbursement requests shall include a copy of Kairos's most recent quarterly Department of Workforce Solutions 903A, or its equivalent, to substantiate current employment levels and upon submission of proof of payment for eligible expenses as per paragraph #6. Payments may be withheld if Company is not in good standing with City, State, or Federal agencies.



The City Contribution. Pursuant to the Project Ordinance and the LEDA Ordinance, the City has committed the amount of \$500,000 to be used in connection with the Project. The City's Contribution will be in increments of \$250,000 upon the same terms and schedule as the State Contribution as outlined in paragraphs 3(B) and 3(C) herein.

Time Commitment. Kairos has commenced certain acquisition, construction renovations and improvements to the Project Facilities. Operations at the Project Facilities are to begin following completion of construction, improvements and renovations or as soon thereafter as possible. Kairos will continue to occupy the Project Facilities and diligently conduct operations in the Project Facilities in the manner contemplated by this Agreement at least through December 31, 2034.

6. Use of Public Contributions. Kairos will be eligible for reimbursement of up to \$3,500,000 for reimbursements for acquisition, construction, renovation, and improvements related to the Project Facilities actually incurred after January 22, 2024 and paid for by Kairos, subject to the receipt by the City of the State Contribution. The City will make payment to Kairos following submission to the City of documentation satisfactory to the City evidencing payment of eligible expenses related to construction, renovation and improvements with respect to the Project.

No Project funds will be used to reimburse expenses from any individuals or a company that has a financial interest in Kairos or its employees.

7. Job Commitment and Clawbacks.

A. Number of Jobs. Kairos Power will employ at least 100 full-time employees by December 31, 2029, at an average annual salary of more than \$100,000 plus benefits, and maintain at least 60 full-time employees (90% of total) through December 31, 2029 (the "Jobs"). A Job will represent an employment position for a person for at least one pay period consisting of at least 32 hours of work per week and offering the employee the full range of benefits offered to other similarly situated Kairos Power employees from time to time. Positions filled by contract, part-time and temporary workers will not be considered Jobs. All references herein to "employees" mean employees in Jobs as contemplated by this Section 7.A.

B. Wages and Benefits. Kairos anticipates that the Jobs will fall within the wage ranges and will come with the benefits shown on Exhibit B. However, failure to meet the wage and benefit projections shown on Exhibit B shall not constitute an Event of Default (defined below) or form the basis for any clawback payment.

C. Performance Clawbacks. If Kairos does not employ at least 90% of the required number of full-time employees as set forth in Section 8.A herein by December 31, 2025, or by December 31 of any year thereafter through the year 2034, then subject to the remainder of this Section 7.C, Kairos will repay to the City, within sixty (60) days of the due date of the annual report referred to in Section 11 below, ten percent (10%) of the total amount of the City Contribution and State Contribution paid on behalf of Kairos pursuant to this Agreement that has already been disbursed to Kairos for such year as of the date of repayment (the "Performance Clawback").

Notwithstanding the foregoing, if Kairos fails to employ the required full-time employees as identified in Section 7.A herein, and believes Business Climate Changes were the cause for its failure to meet such requirements, Kairos will so advise the City in writing describing the Business Climate Changes in detail. “Business Climate Changes” mean substantial changes outside of the control of Kairos, in the segment of industry in which Kairos operates, that cause a significant decrease in the amount of production Kairos is able to achieve. The shifting of Kairos operations to another Project, whether within or outside of Albuquerque, will not constitute a Business Climate Change.

If the City determines that Business Climate Changes affect the ability of Kairos to maintain employment levels, it may waive or modify the Performance Clawback, but only related to the City Contribution and the City shall consult with the State EDD as to any potential waiver of the Performance Clawback or a portion thereof related to the State Contribution. Any Performance Clawback due will be paid within 15 days after the City notifies Kairos of its decision or the decision of the State EDD. If Kairos does not attribute the failure to meet employment requirements to Business Climate Changes, the payment of any Performance Clawback due will be submitted to the City within ten (10) days after the due date of the annual report reflecting the failure to maintain the required employment level.

D. Project Closure Clawback. Should Kairos cease operation, or notify the City of its intent to cease operation, of the Project (i.e., cease to conduct operations at the Project) before December 31, 2034, Kairos shall, within ninety (90) days of the cessation of operations, pay to the City, in cash, an amount equal to a specified percentage of the amount of the City Contribution and State Contribution paid pursuant to this Agreement, with the specific percentage based on the date of cessation of operations in accordance with the following table:

Date of Cessation of Operations	Percent of Public Contributions to be Repaid
Years 1-5 (Year 1 shall commence on the date of signing the lease. All subsequent years are based on anniversary dates of that signing.)	100%
Years 6-8	60%
Years 9-10	25%

Winding down of Kairos’s operations at the Project in preparation for a cessation of operations may be considered a cessation of operations. “Winding down” operations may include layoffs by Kairos of greater than or equal to 75% of employees at the Project Facilities.

E. Nuclear Material. Kairos shall be subject to a 100% clawback of all distributed State Contribution and City Contribution if any nuclear material is ever utilized or present at the Project Facilities.

F. Maximum Clawback; Unpaid Payments. Notwithstanding anything herein to the contrary, the maximum aggregate clawback payable hereunder will be \$3,500,000, not including interest. Any clawbacks not paid when due shall bear interest at the Prime Rate plus 2% per annum from the due date until paid. “Prime Rate” means the U.S. prime rate as reported

## LEDA 25-3: Kairos Power LLC Project

from time to time in *The Wall Street Journal* in its Bonds, Rates and Yields table, or successor table.

### **FINDINGS:**

1. Kairos Power Inc. is a qualified entity as defined by the State's Local Economic Development Act and the City enabling legislation (F/S O-14-10); and
- 2 LEDA 25-3 would make positive substantive contributions to the local economy and community by creating 100 economic base jobs; and
3. Subject to the development of acceptable security documents, LEDA 25-3 would comply with the adopted City plans and policies, and meet community economic development priorities and objectives, including the requirement to operate for at least ten years; and
4. Subject to the development of acceptable security documents, LEDA 25-3 would adequately meet the evaluation criteria established by the City for Local Economic Development Act projects, including the requirement that the City recoup the value of its investment within 10 years.

### **STAFF RECOMMENDATION:**

Based on the above findings, staff recommends approval of LEDA 25-3 as proposed in the project plan application.

Max Gruner, Director  
Economic Development Department

**Project Participation Agreement**

**City of Albuquerque and Kairos Power LLC**

**Local Economic Development Act Project 24-**

This Project Participation Agreement is made as of this \_\_\_\_ day of November, 2024 by and between the CITY OF ALBUQUERQUE, NEW MEXICO (the "City"), and KAIROS POWER LLC, a Delaware corporation with a place of business at 707 West Tower Avenue, Alameda, California 94501 ("Kairos"). Together the City and Kairos are called the "Parties," and individually each a "Party."

WHEREAS, it is the policy of the City to aid and encourage the location of desirable business enterprises in the City and to facilitate a favorable governmental atmosphere for enriching the lives of its citizens by supporting the development of a healthy economy; and

WHEREAS, pursuant to the Local Economic Development Act, Sections 5-10-1 to 5-10-13 NMSA 1978 ("LEDA"), the City has adopted Ordinance No. F/S O-04-10 (the "LEDA Ordinance"), approving an economic development plan for the City and authorizing the City to consider applications for economic development assistance; and

WHEREAS, Kairos has submitted to the City an application in the form attached to this Agreement as Exhibit A (the "Kairos Application") proposing that, in exchange for certain LEDA assistance described below, Kairos will undertake and complete a certain project, which is defined to include the following elements (the "Project"):

The purchase, development, rehabilitation, occupancy, and operation of more than 185,000 square feet of research, development, industrial and office space located in Albuquerque at Mesa Del Sol, including the facility at 5201 Hawking SE, Albuquerque, New Mexico 87106 (the "Project Facilities");

Occupy and operate the facility for the research, development, and testing of advanced salt coolant technology and related systems. The proposed operation will primarily focus on the engineering, development, and testing of technology to utilize low-pressure molten fluoride salt as a coolant in a novel advanced nuclear reactor with an inherently safe design based on synergies between the fuel source, salt coolant, and passive safety mechanisms;

Commitment to operate the Project for a minimum of ten (10) years;

Kairos shall hire and retain employees as contemplated by this Agreement all in accordance with the schedule and other terms and conditions set forth in Section 7 herein; and

WHEREAS, the State Economic Development Department (the “State EDD”) has committed up to \$3,000,000 in State LEDA funds (the “State Contribution”) for partial reimbursement of acquisition, construction, renovation and improvement costs of the Project Facilities and the City has committed up to \$500,000 in City LEDA funds (the “City Contribution”) to be used for partial reimbursement of acquisition, construction renovation, and improvement costs of the Project Facilities; and

WHEREAS, the City adopted Ordinance No. O-24-\_\_\_\_ on October \_\_, 2024 (the “Project Ordinance”) (i) finding that Kairos is a qualifying entity as defined in Section 5-10-3(G) NMSA, (ii) approving the Kairos Application for assistance with the Project pursuant to the LEDA Ordinance, which Application proposed that the City direct \$3,000,000 in funds to be received from the State EDD as the State Contribution and \$500,000 in funds to be committed by the City as the City Contribution, all to finance certain statutorily eligible expenses of the Project, including acquisition, renovation and improvement of the Project Facilities, and (iii) approving this Agreement; and

WHEREAS, Kairos estimates a total investment of \$269,753,025 by the end of 2030 related to acquisition, construction, renovation, and improvement of the Project Facilities and acquiring necessary equipment; and,

WHEREAS, the Kairos Application proposes that in exchange for Kairos undertaking and completing the Project, the City funds obtained from the State EDD, pursuant to LEDA, in addition to local City LEDA funds, will be used to reimburse a portion of Kairos expenses related to the Project, on the terms set forth herein; and

WHEREAS, the City has reviewed the cost-benefit analysis conducted by the University of New Mexico’s Bureau of Business and Economic Research (“BBER”) with respect to the Project, which shows that the City will recoup the value of its contribution within ten (10) years; and

WHEREAS, the Kairos Application clearly demonstrates that Kairos, by completing the Project, will be making a substantive contribution to the community, as required by the LEDA Ordinance; and

WHEREAS, the City Council has determined that these benefits and community contributions adequately meet the intent of having the City recoup the value of its investment; and

WHEREAS, the total amount of public money expended and the value of credit pledged in each fiscal year in which that money is expended by the City for economic development projects pursuant to LEDA does not and will not exceed ten percent of the general fund expenditures of the City in that fiscal year; and

WHEREAS, the City anticipates receiving an appropriation of funds allocated from the State EDD with the direction of the State EDD to convey these funds to the benefit of Kairos via LEDA; and

WHEREAS, LEDA and the LEDA Ordinance require the parties to enter into a Project Participation Agreement meeting the requirements of LEDA and the LEDA Ordinance; and

NOW, THEREFORE, in consideration of these premises and the agreements by the parties set forth herein, Kairos and the City further agree as follows:

1. Goals and Objectives. The goals and objectives of the Project are to create and support an economic development project that fosters, promotes, and enhances local economic development efforts. The goal is that the Project will provide job growth and career opportunities for Albuquerque-area residents and otherwise make a substantive contribution to the community as set forth in this Agreement and in the Kairos Application.

2. Company Contribution. Kairos has undertaken certain renovations and improvements to the Project Facilities; and will occupy and operate the Project Facilities and will use the Project for advanced energy technology research and development; and will hire and retain employees as contemplated by this Agreement, all in accordance with the schedule and other terms and conditions set forth in this Agreement. Kairos will maintain the Project's operations in Albuquerque for a minimum of ten (10) years. Kairos will comply with all applicable laws in connection with the operation of the Project and will timely pay all applicable property taxes with respect thereto, taking into account the tax abatements afforded through the industrial revenue bond project contemporaneously entered into between the City and Kairos.

3. The State Contributions; Procedure for Disbursement of the State Contributions. The City anticipates that the State Contribution of \$3,000,000 will be delivered to the City for subsequent disbursement to Kairos, following enactment of the Kairos LEDA ordinance and execution of this Agreement and an intergovernmental agreement between the State and the City. The City will submit an invoice to the State and request transfer of the State funds. Upon receipt, the City will place the State Contribution into a separate account established in connection with the Project, as required by law. If, and only if, the City receives the State Contribution, the City will disburse the State Contribution to Kairos in the manner described in this Agreement. The State Contribution will be distributed to Kairos upon reaching the following benchmarks.

A. \$2,000,000 will be distributed upon the City's passage of the Project Ordinance and receipt of the Certificate of Occupancy for the Project Facilities, incurrence of LEDA eligible expenses and Kairos being current with all required reporting under this Agreement.

B. \$500,000 will be distributed upon Kairos hiring 30 full-time employees, for a total of 164 employees, which employment is maintained for one quarterly reporting period, incurrence of LEDA eligible expenses and Kairos being current with all required reporting under this Agreement.

C. \$500,000 will be distributed upon Kairos hiring 79 full-time employees, for a total of 234 employees, which employment is maintained for one quarterly reporting period, incurrence of LEDA eligible expenses and Kairos being current with all required reporting under this Agreement.

Pursuant to Section 11, reimbursement requests shall include a copy of Kairos's most recent quarterly Department of Workforce Solutions 903A, or its equivalent, to substantiate current employment levels and upon submission of proof of payment for eligible expenses as per paragraph #6. Payments may be withheld if Company is not in good standing with City, State, or Federal agencies.

4. The City Contribution. Pursuant to the Project Ordinance and the LEDA Ordinance, the City has committed the amount of \$500,000 to be used in connection with the Project. The City's Contribution will be in increments of \$250,000 upon the same terms and schedule as the State Contribution as outlined in paragraphs 3(B) and 3(C) herein.

5. Time Commitment. Kairos has commenced certain acquisition, construction renovations and improvements to the Project Facilities. Operations at the Project Facilities are to begin following completion of construction, improvements and renovations or as soon thereafter as possible. Kairos will continue to occupy the Project Facilities and diligently conduct operations in the Project Facilities in the manner contemplated by this Agreement at least through December 31, 2034.

6. Use of Public Contributions. Kairos will be eligible for reimbursement of up to \$3,500,000 for reimbursements for acquisition, construction, renovation, and improvements related to the Project Facilities actually incurred after January 22, 2024 and paid for by Kairos, subject to the receipt by the City of the State Contribution. The City will make payment to Kairos following submission to the City of documentation satisfactory to the City evidencing payment of eligible expenses related to construction, renovation and improvements with respect to the Project.

No Project funds will be used to reimburse expenses from any individuals or a company that has a financial interest in Kairos or its employees.

7. Job Commitment and Clawbacks.

A. Number of Jobs. Kairos Power will employ at least 100 full-time employees by December 31, 2029, at an average annual salary of more than \$100,000 plus benefits, and maintain at least 60 full-time employees (90% of total) through December 31, 2029 (the "Jobs"). A Job will represent an employment position for a person for at least one pay period consisting of at least 32 hours of work per week and offering the employee the full range of benefits offered to other similarly situated Kairos Power employees from time to time. Positions filled by contract, part-time and temporary workers will not be considered Jobs. All references herein to "employees" mean employees in Jobs as contemplated by this Section 7.A.

B. Wages and Benefits. Kairos anticipates that the Jobs will fall within the wage ranges and will come with the benefits shown on Exhibit B. However, failure to meet the wage and benefit projections shown on Exhibit B shall not constitute an Event of Default (defined below) or form the basis for any clawback payment.

C. Performance Clawbacks. If Kairos does not employ at least 90% of the required number of full-time employees as set forth in Section 8.A herein by December 31, 2025, or by December 31 of any year thereafter through the year 2034, then subject to the remainder of this Section 7.C,

Kairos will repay to the City, within sixty (60) days of the due date of the annual report referred to in Section 11 below, ten percent (10%) of the total amount of the City Contribution and State Contribution paid on behalf of Kairos pursuant to this Agreement that has already been disbursed to Kairos for such year as of the date of repayment (the “Performance Clawback”).

Notwithstanding the foregoing, if Kairos fails to employ the required full-time employees as identified in Section 7.A herein, and believes Business Climate Changes were the cause for its failure to meet such requirements, Kairos will so advise the City in writing describing the Business Climate Changes in detail. “Business Climate Changes” mean substantial changes outside of the control of Kairos, in the segment of industry in which Kairos operates, that cause a significant decrease in the amount of production Kairos is able to achieve. The shifting of Kairos operations to another Project, whether within or outside of Albuquerque, will not constitute a Business Climate Change.

If the City determines that Business Climate Changes affect the ability of Kairos to maintain employment levels, it may waive or modify the Performance Clawback, but only related to the City Contribution and the City shall consult with the State EDD as to any potential waiver of the Performance Clawback or a portion thereof related to the State Contribution. Any Performance Clawback due will be paid within 15 days after the City notifies Kairos of its decision or the decision of the State EDD. If Kairos does not attribute the failure to meet employment requirements to Business Climate Changes, the payment of any Performance Clawback due will be submitted to the City within ten (10) days after the due date of the annual report reflecting the failure to maintain the required employment level.

D. Project Closure Clawback. Should Kairos cease operation, or notify the City of its intent to cease operation, of the Project (i.e., cease to conduct operations at the Project) before December 31, 2034, Kairos shall, within ninety (90) days of the cessation of operations, pay to the City, in cash, an amount equal to a specified percentage of the amount of the City Contribution and State Contribution paid pursuant to this Agreement, with the specific percentage based on the date of cessation of operations in accordance with the following table:

Date of Cessation of Operations	Percent of Public Contributions to be Repaid
Years 1-5 (Year 1 shall commence on the date of signing the lease. All subsequent years are based on anniversary dates of that signing.)	100%
Years 6-8	60%
Years 9-10	25%

Winding down of Kairos’s operations at the Project in preparation for a cessation of operations may be considered a cessation of operations. “Winding down” operations may include layoffs by Kairos of greater than or equal to 75% of employees at the Project Facilities.



E. Nuclear Material. Kairos shall be subject to a 100% clawback of all distributed State Contribution and City Contribution if any nuclear material is ever utilized or present at the Project Facilities.

F. Maximum Clawback; Unpaid Payments. Notwithstanding anything herein to the contrary, the maximum aggregate clawback payable hereunder will be \$3,500,000, not including interest. Any clawbacks not paid when due shall bear interest at the Prime Rate plus 2% per annum from the due date until paid. "Prime Rate" means the U.S. prime rate as reported from time to time in *The Wall Street Journal* in its Bonds, Rates and Yields table, or successor table.

8. Security. To secure the performance of its obligations under this Agreement, Kairos has provided to the City security acceptable to and in favor of the City in the form attached hereto as Exhibit C.

9. Events of Default and Remedies.

A. Failure to Comply with Obligations. Failure by Kairos to comply with any obligation under this Agreement, including without limitation, the failure to make timely payment of any clawback payment due hereunder, shall be an Event of Default. Notwithstanding the foregoing, failure to meet employment projections or failure to meet wage and benefit projections shall not be considered an Event of Default; however, the failure to make timely payment of any clawback payment due as a result thereof shall be an Event of Default.

B. Notice of Event of Default. If any Event of Default occurs, the City shall notify Kairos in writing specifying the alleged failure's nature and, where appropriate, how the alleged failure may be cured, and Kairos shall have thirty (30) days in which to cure such Event of Default; but if the Event of Default is of a nature requiring more than thirty (30) days to cure, Kairos shall have up to an additional sixty (60) days to cure the alleged failure unless the City agrees to provide Kairos with additional time to cure the alleged failure. If the Event of Default is not cured within such thirty-day period, the City shall have and may exercise any remedies available at law or in equity.

10. Fees. Kairos will promptly pay or reimburse the City for all reasonable third-party expenses incurred by the City in connection with this Agreement and the Project, provided, however, that Kairos shall not be liable for costs incurred by the City that are the responsibility of the City in the ordinary course of business. If so determined by the City, in its sole discretion, such third-party expenses may be offset against or reimbursed from the City Contribution or the State Contribution. Although the City does not anticipate incurring significant third-party expenses during the term of this Agreement, such expenses shall consist of expenses associated with performance reviews or audits with respect to the Project and legal fees for outside counsel in the event of any proposed amendment to this Agreement or any necessary enforcement action with respect to this Agreement.

11. Annual Reporting Requirement, Performance Review and Termination. Annually, on or before April 1, 2025 or other date specified by the City, Kairos will provide to the City data for the previous calendar year regarding its workforce and such other information necessary for the City or its independent contractor to determine whether Kairos has met its obligations under this Agreement. As

required by the LEDA Ordinance, the Project will be subject to an annual performance review conducted by City staff, which will evaluate whether the Project is attaining the goals and objectives set forth in Section 1 of this Agreement. This review shall be presented to the City administration and the City Council. If the goals and objectives are not being attained due to Kairos missing the aforementioned benchmarks, the City will work in good faith with Kairos regarding the missed benchmarks; however, the City Council at a public hearing may terminate assistance to the Project by passage of an ordinance which terminates this Agreement and specifies the disposition of all assets and obligations of the Project, after satisfying this Agreement and all rights of the parties arising under this Agreement through the date of such termination. Kairos has the right to invoke the dispute resolution procedures set forth in paragraph 12 herein before any clawback related to performance targets is required. In addition, pursuant to LEDA, the City may enact an ordinance terminating the LEDA Ordinance and dissolving or terminating any or all projects. In the event that the City terminates the LEDA Ordinance or this Agreement, the City will specify the disposition of all assets and obligations of the Project after satisfying this Agreement and all rights of the parties arising under this Agreement through the date of such termination.

Additionally, Kairos will provide to the State of New Mexico Economic Development Department their most recent quarterly Department of Workforce Solutions 903A Report or its equivalent on a quarterly basis beginning with July 31, 2021 and continuing on January 31, April 30, July 31, and October 31 of each year until the completion of this agreement.

12. Dispute Resolution. The parties will work in good faith to resolve any disputes that arise hereunder. In the event of a dispute between the parties, the President of Kairos, or his/her designee, and the Director or Deputy Director of the City's Economic Development Department shall meet and attempt in good faith to resolve the dispute. If they are unable to resolve the dispute, the President of Kairos and the City's Chief Administrative Officer shall meet and attempt in good faith to resolve the dispute. Nothing contained in this Agreement constitutes a waiver of any Party's right to seek judicial relief.

13. Discrimination Prohibited. In performing the Services required hereunder, the parties hereto shall not discriminate against any person on the basis of race, color, religion, gender, sexual preference, sexual orientation, national origin or ancestry, age, physical handicap, or disability as defined in the Americans With Disabilities Act of 1990, as now enacted or hereafter amended.

14. ADA Compliance. In performing the Services required hereunder, Kairos agrees to meet all the requirements of the Americans with Disabilities Act of 1990, and all applicable rules and regulations (ADA), which are imposed directly on Kairos or which would be imposed on the City as a public entity. Kairos agrees to be responsible for knowing all applicable requirements of the ADA and to defend, indemnify and hold harmless the City, its officials, agents and employees from and against any and all claims, actions, suits or proceedings of any kind brought against said parties as a result of any acts or omissions of Kairos or its agents in violation of the ADA.

15. Audits and Inspections. At any time during normal business hours and as often as the City may deem necessary, there shall be made available to the City for examination all of Kairos's records with respect to all matters covered by this Agreement. Kairos shall permit the City to audit,

examine, and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement. Kairos understands and will comply with the City's Accountability in Government Ordinance, §2-10-1 et seq. and Inspector General Ordinance, §2-17-1 et seq. R.O.A. 1994, and also agrees to provide requested information and records and appear as a witness in hearings for the City's Board of Ethics and Campaign Practices pursuant to Article XII, Section 8 of the Albuquerque City Charter.

16. Indemnity. Kairos agrees to defend, indemnify and hold harmless the City and its officials, agents and employees from and against any and all claims, actions, suits or proceedings of kind brought against said parties because of any injury or damage received or sustained by any person, persons or property arising out of or resulting from the Services performed by Kairos or Kairos's agents under this Agreement or by reason of any proven, adjudged, or otherwise agreed upon act or omission, neglect or misconduct of Kairos or Kairos's agents or employees or any subcontractor or its agents or employees. The indemnity required hereunder shall not be limited by reason of the specification of any particular insurance coverage in this Agreement.

17. No Collusion. Kairos represents that this Agreement is entered into by Kairos without collusion on the part of Kairos with any person or firm, without fraud and in good faith. Kairos also represents that no gratuities, in the form of entertainment, gifts or otherwise, were, or during the term of this Agreement, will be offered or given by Kairos or any agent or representative of Kairos to any officer or employee of the City with a view towards securing this Agreement or for securing more favorable treatment with respect to making any determinations with respect to performing this Agreement.

18. Applicable Law and Venue. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of New Mexico, and the laws, rules and regulations of the City of Albuquerque. The venue for actions arising out of this Agreement is Bernalillo County, New Mexico.

19. Enforcement. Kairos agrees to pay to the City all costs and expenses including reasonable attorney's fees incurred by the City in exercising any of its rights or remedies in connection with the enforcement of this Agreement.

20. Electronic Signatures. Authenticated electronic signatures are legally acceptable pursuant to Section 14-16-7 NMSA 1978. The parties agree that this Agreement may be electronically signed and that the electronic signatures appearing on the Agreement are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.

21. Further Assurances and Mutual Cooperation. Each Party agrees to deliver and execute any and all notices, certificates, instruments and other such documents and take any and all actions as any Party hereto reasonably may require to carry out this Agreement and such transactions hereby contemplated, and no Party will take any action that may deprive the other Party of the enjoyment of the rights this Agreement secures. Each Party further agrees to select its own legal counsel and to retain such legal counsel at that Party's expense.

22. Severability. If any part or provision of this Agreement is found to be or becomes unenforceable or illegal for any reason, such part or provision may be modified as necessary to render this Agreement enforceable and legal. If such part or provision cannot be modified as such, the part or provision shall be severed from this Agreement, and the remaining parts and provisions of this Agreement shall remain in full force and effect.

23. Force Majeure. Neither Party shall be liable to the other Party for any failure to perform any provisions or obligations of this Agreement if such failure to perform is caused by or results directly or indirectly from Force Majeure. "Force Majeure" means any cause beyond the reasonable control of a Party affected, including but not limited to, any acts of God, fire, flood, storm, strike, riot or civil disturbance, war, earthquake, lightning, epidemic, labor disturbance, sabotage, or restraint by court or public authority, or any other cause beyond the reasonable control of a Party affected whether similar or dissimilar to the ones listed, which makes it impossible or unreasonably difficult for a Party to perform its obligations under this Agreement. Nothing contained in this paragraph shall be construed to require either Party to prevent or settle a strike against its will. The Party unable to perform its obligations due to Force Majeure will provide notice to the other Party within five (5) days of its becoming aware of the Force Majeure of its inability to perform and its expectations as to when, if ever, it will be able to resume its obligations.

24. Notice. All notices or other written communications, including requests for disbursement, that are required or permitted to be given pursuant to this Agreement must be in writing and delivered personally, by a recognized courier service, by a recognized overnight delivery service, by fax, by electronic mail, or by registered or certified mail, postage prepaid, to the parties at the addresses shown in the signature block of this Agreement. If notice is mailed, it will be deemed received on the earlier of actual receipt or on the third business day following the date of mailing. If a notice is hand-delivered or sent by overnight delivery service, it will be deemed received upon actual delivery. If any written notice is sent by facsimile or electronic mail, it will be deemed received upon printed or written confirmation of the transmission. A party may change its notice address by written notice to the other party to this Agreement.

25. Assignment by Kairos. Generally, this Agreement may not be assigned without the prior, written consent of the non-assigning Parties, and the City retains the right to determine whether any assignee is a qualifying entity pursuant to LEDA and the LEDA Ordinance. Regardless of any other provision herein, this Agreement may be assigned by Kairos as part of a sale of all, or substantially all, of Kairos's assets, provided, however, that if such an assignment occurs before December 31, 2034, (i) the assignee assumes, in writing, Kairos's obligations under this Agreement, which will include (a) confirmation that the commitment of Kairos remains in place through December 31, 2034, or (b) the assignee provides another form of security reasonably satisfactory to the City, and (ii) Kairos provides to the City, at least five (5) days prior to such assignment's effective date, a copy of the assignment and (x) such confirmation of Kairos's commitment or (y) such form of security reasonably satisfactory to the City. Notwithstanding any of the foregoing, Kairos may terminate this Agreement in the event that Kairos sells all, or substantially all, of Kairos's assets.

26. Miscellaneous. This Agreement binds and inures to the benefit of the City and Kairos and their respective successors and permitted assigns. This Agreement may not be assigned without the written consent of the non-assigning Party. This Agreement, together with the Letter or Credit, represents the entire agreement of the parties on the subject hereof and supersedes all prior agreements or understandings between the parties, whether written or verbal. This Agreement may be amended or modified, and the performance by any Party of its obligations under this Agreement may be waived, only in a written instrument duly executed by both parties. This Agreement may be executed in any number of counterparts, each of which is an original and all of which taken together constitute one instrument. This Agreement is governed by and is to be construed in accordance with the laws of New Mexico applicable to agreements made and to be performed in New Mexico.

27. Effective Date. This Agreement will be effective on November \_\_\_\_\_, 2024 (the "Effective Date").

[Signature Page Follows]

CITY OF ALBUQUERQUE,  
NEW MEXICO

KAIROS POWER LLC,  
a Delaware limited liability company

By \_\_\_\_\_

Name: Samantha Sengel

Title: Chief Administrative Officer

Date: \_\_\_\_\_

By \_\_\_\_\_

Name:

Title:

Date: \_\_\_\_\_

Address for notice:

One Civic Plaza NW

Albuquerque, NM 87102

Attention: Economic Development Director

Tel: (505)768-3000

Email: mgruner@cabq.gov

Address for notice:

Attention:

Kairos Power LLC

707 West Tower Avenue

Alameda, California 94501

Tel: (510) 506-2857

Email: blandford@kairospower.com

With a copy to:

City Attorney

One Civic Plaza NW

Albuquerque, NM 87102

Tel: (505)768-3000

Email: [lkeefe@cabq.gov](mailto:lkeefe@cabq.gov)

Mailing Address:

P.O. Box 1293

Albuquerque, NM 87103

Exhibits

- Exhibit A      Application for LEDA Assistance
- Exhibit B      Wages and Benefits
- Exhibit C      Letter of Credit



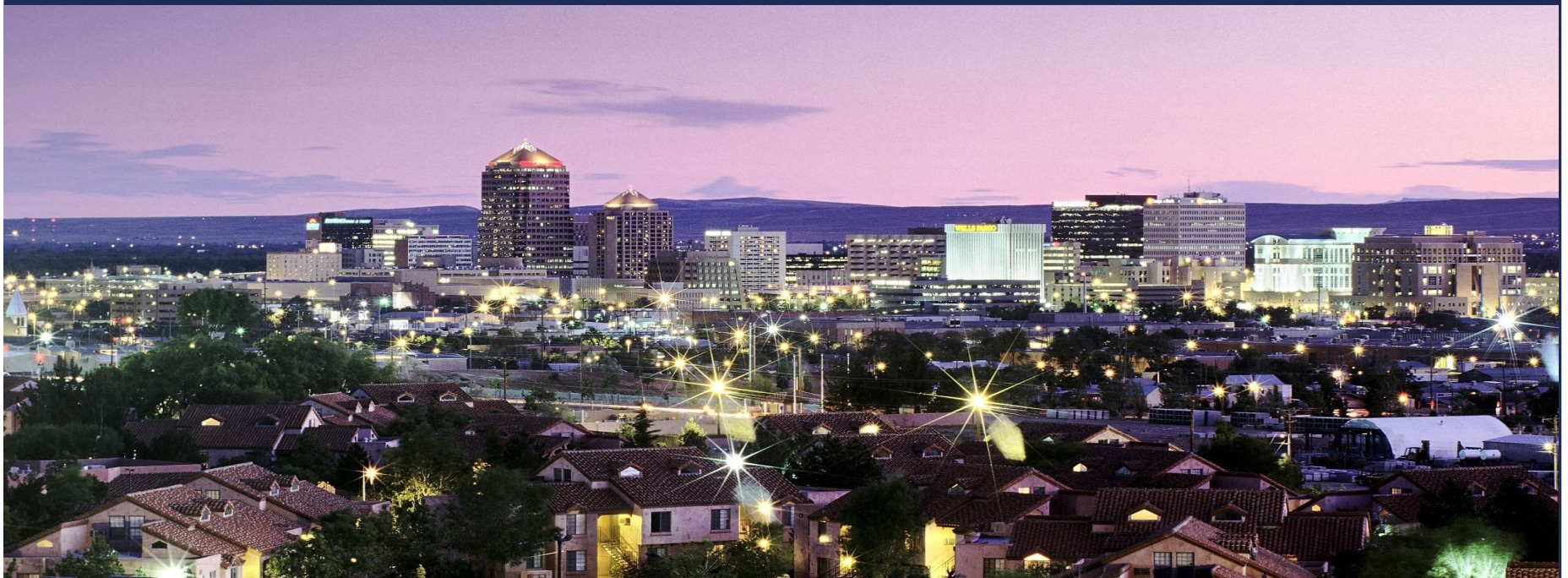
**EDD** ECONOMIC  
DEVELOPMENT  
DEPARTMENT

7/1/2024

## FISCAL IMPACT ANALYSIS AND ECONOMIC IMPACT OF THE EXPANSION OF KAIROS POWER, LLC

Prepared by:

New Mexico Economic Development Department  
Joseph Montoya Building  
1100 S. St. Francis Drive  
Santa Fe, New Mexico 87505







## Purpose and Limitations:

This report and analysis, provided by the New Mexico Economic Development Department, relies on prospective estimates of business activity. These estimates, which are provided by the company, may not be realized due to unforeseen events that are outside the control of the company and unknown to the New Mexico Economic Development Department.

The New Mexico Economic Development Department made reasonable efforts to ensure that the estimates provided by the company, are realistic estimates of future activity.

The model was created by the New Mexico Economic Development Economists and used assumptions to generate the final report. The report and analysis provided by the New Mexico Economic Development Department is not a guarantee that any of the estimates or results contained in this report will actually be achieved.

## Introduction:

This report and analysis presents the results of an economic impact analysis performed using a model developed by the New Mexico Economic Development Department. The report estimates the impact that a potential project may have on the state and local economies and estimates the costs and benefits for the state and local economies over a 10-year period. The report and analysis uses RIMS II Multipliers produced by the U.S. Bureau of Economic Analysis (BEA).

Most projects produce a growth in population and/or a growth in the workforce in a City, County and the State of New Mexico. All growth comes at a cost, the additional economic activity and population growth stimulated by the project will generate additional costs in terms of providing basic infrastructure (roadways, bridges and utilities) and public services (including public safety, schools and administrative services). For example, if the applicant hires employees from outside the State, County and City, those workers who end up relocating their residence to within one or all of those areas, the population for which the government must provide services also increases. The costs associated with the expansion are broken down into two categories: 1) New residents to the State, County and City. 2) New Mexican residents hired to work for the company. The analysis assumes that all workers will live in the area of the expansion.

## Description of the Company:

Kairos Power is a mission-driven engineering company headquartered in Alameda, CA. The company is focused on the delivery of a clean, affordable and safe energy solution through the integrated design, licensing and demonstration of advanced reactor technology. Besides its headquarters in Alameda, CA, the company has operations in Albuquerque, NM, Oak Ridge, TN, and Charlotte, NC.

## Description of the Project:

Kairos Power is seeking to build a Salt Production facility adjacent to its existing facility in the Mesa del Sol Development at 5201 Hawking Dr SE. The new facility will use its proprietary chemical manufacturing process that is safe for workers and the environment to produce a fluoride salt that will be used as the primary heat transfer fluid in the nuclear reactor the company is building in Oak Ridge, Tennessee. Kairos Power's high-temperature reactor technology is being developed to generate electricity for the US market. Kairos Power is planning to spend \$160 million to construct eight production buildings in 2024-2025. The facility will create at least 30 full-time jobs and it will become fully operational in Q1 2026.

In addition, Kairos Power 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 Power's fuel production capabilities prior to commercial deployment. In the Pebble Development Lab, Kairos Power will develop manufacturing processes to produce annular graphite fuel pebbles using surrogate materials. In the TRISO Development Lab, Kairos Power will use natural uranium to optimize production techniques for NU-TRISO particles that will be implemented off-site. No special nuclear material will be handled at Kairos Power's Mesa del Sol facility. These iterative development cycles will be a critical step in de-risking technology, manufacturing, supply chain, and licensing for the Hermes demonstration reactor and the future commercial deployment of Kairos Power's advanced reactor technology. The projected investment for the fuel development lab facilities is \$25.5 million.

All new construction is expected to be attractive, high-quality metal over block style that will mesh well into the Mesa del Sol development and meet the established standards for the area. Special nuclear material will not be utilized on-site; the purpose of the proposed facilities is the development and testing of the salt coolant technology and related systems.

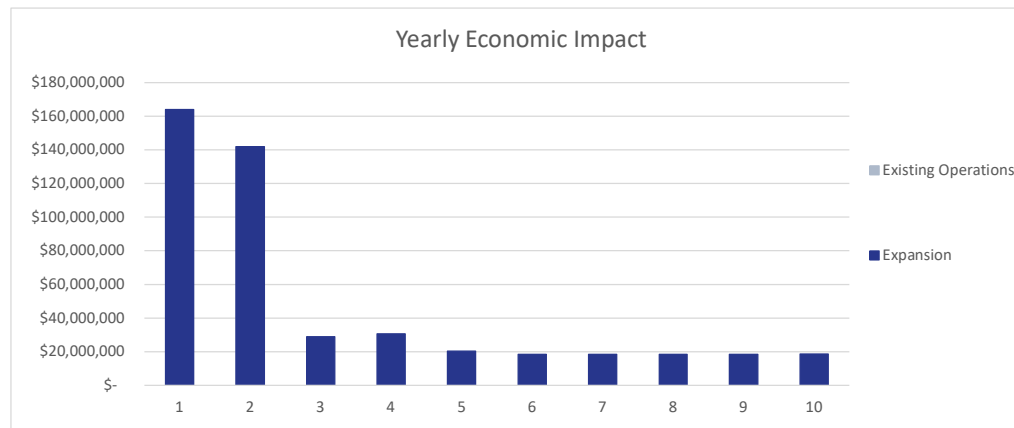




# Economic Impact

### Total Economic Impact

	Total
Estimated Economic Impact Over 10 Years:	\$ 478,683,751
Combined Total Incentive Over 10 Years:	\$ 11,544,283
Economic Impact Rate of Return:	4,047%



### Workers and New Residents over 10 years

	Direct	Indirect and Induced
Number of Jobs Created:	100	74
Estimated Number of Construction Workers:	646	
Estimated Number of New Residents to the State:	47	
Estimated Number of New Residents to the County:	47	
Estimated Number of New Residents to the City:	47	



# Total Public Impacts



## Fiscal Impact of Existing and Expanded Operations Over the Next Ten Years

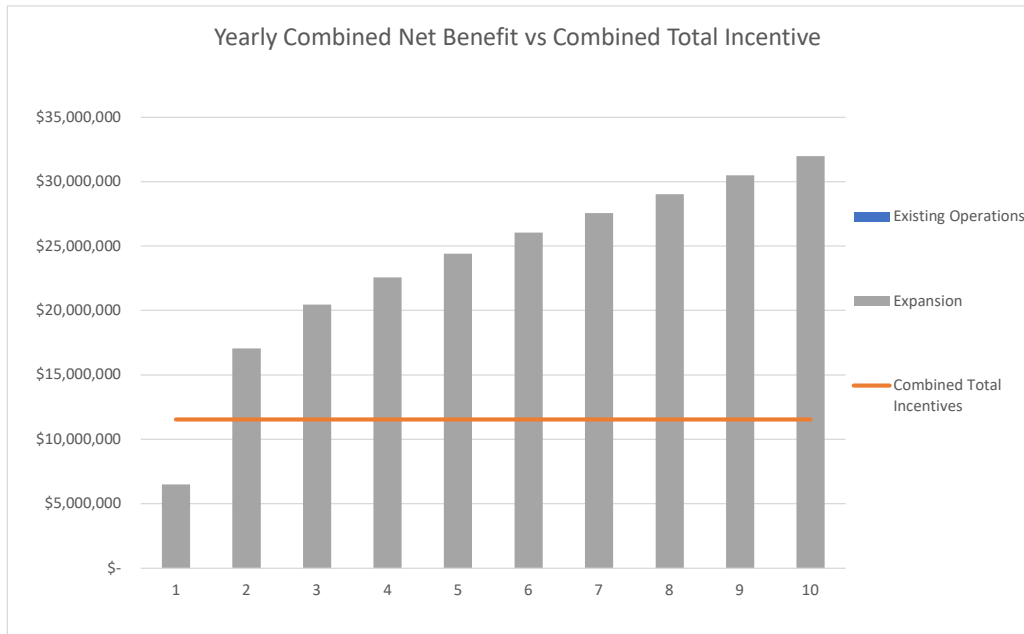
Cumulative Net Benefits					
	Existing Operations	Expansion	Existing & Expanded Operations	Present Value of Net Benefits*	
State of New Mexico	\$ -	\$ 17,181,539	\$ 17,181,539	\$	15,457,481
County	\$ -	\$ 2,170,605	\$ 2,170,605	\$	1,973,569
City	\$ -	\$ 12,640,245	\$ 12,640,245	\$	10,961,114
School District	\$ -	\$ 31,904	\$ 31,904	\$	24,939
Special Taxing District	\$ -	\$ 48,120	\$ 48,120	\$	37,615
<b>Total</b>	<b>\$ -</b>	<b>\$ 32,072,413</b>	<b>\$ 32,072,413</b>	<b>\$</b>	<b>28,454,718</b>

\* The Present Value of Net Benefits expresses the future stream of net benefits received over several years as a single value in today's dollars. Today's dollar and a dollar to be received at differing times in the future are not comparable because of the time value of money. The time value of money is the interest rate or each taxing entity's discount rate. This analysis uses a discount rate of 5% to make the dollars comparable.

\*\* In the cumulative net benefits of the existing and expanded operations for the State of New Mexico, corporate income tax has been removed from the existing operations total to avoid double counting.

### Total Public Net Benefit

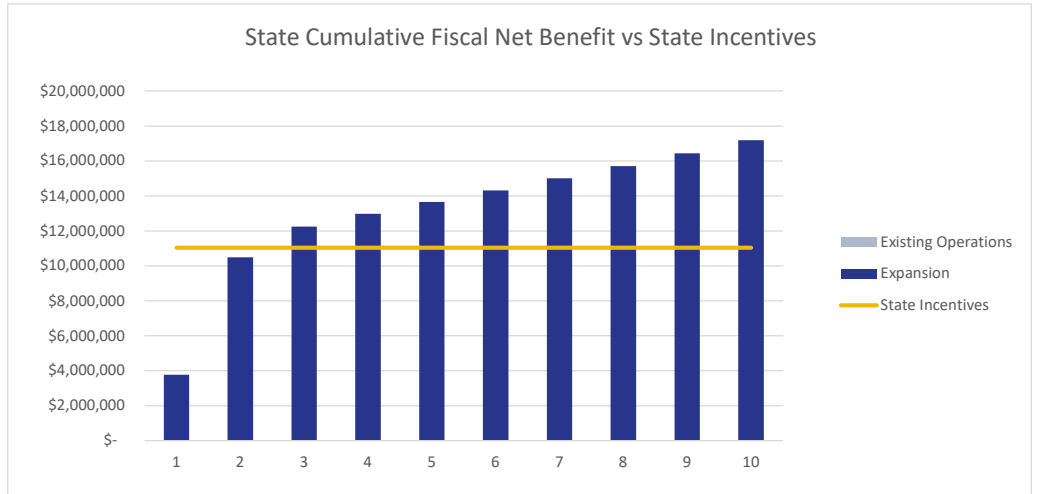
	Total
Estimated Total Public Net Benefit Over 10 Years:	\$ 31,992,389
Combined Total Incentive Over 10 Years:	\$ 11,544,283
Total Public Net Benefit Rate of Return:	177%





# State Impacts





### Incentives

Total State Incentive:	\$ 11,044,283
State Incentive Per Job:	\$ 110,443

### Combined Payback and Return

State Payback Period Combined:	2.31 Years
State Rate of Return Combined:	40%

### Expansion Only Payback and Return

State Payback Period Expansion:	2.31 Years
State Rate of Return Expansion:	40%

### State Net Benefits Of Current Operations

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -



### State Net Benefits Of Expansion

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 3,802,434	\$ 28,016	\$ 3,774,418	\$ 3,774,418
2	\$ 6,778,538	\$ 57,601	\$ 6,720,937	\$ 10,495,355
3	\$ 1,821,969	\$ 78,414	\$ 1,743,555	\$ 12,238,909
4	\$ 831,790	\$ 95,010	\$ 736,780	\$ 12,975,690
5	\$ 785,856	\$ 102,470	\$ 683,386	\$ 13,659,076
6	\$ 768,508	\$ 105,339	\$ 663,169	\$ 14,322,244
7	\$ 791,504	\$ 108,289	\$ 683,216	\$ 15,005,460
8	\$ 815,189	\$ 111,321	\$ 703,868	\$ 15,709,328
9	\$ 839,583	\$ 114,438	\$ 725,145	\$ 16,434,474
10	\$ 864,707	\$ 117,642	\$ 747,065	\$ 17,181,539

### State Combined Net Benefits

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 3,802,434	\$ 28,016	\$ 3,774,418	\$ 3,774,418
2	\$ 6,778,538	\$ 57,601	\$ 6,720,937	\$ 10,495,355
3	\$ 1,821,969	\$ 78,414	\$ 1,743,555	\$ 12,238,909
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6	\$ 768,508	\$ 105,339	\$ 663,169	\$ 14,322,244
7	\$ 791,504	\$ 108,289	\$ 683,216	\$ 15,005,460
8	\$ 815,189	\$ 111,321	\$ 703,868	\$ 15,709,328
9	\$ 839,583	\$ 114,438	\$ 725,145	\$ 16,434,474
10	\$ 864,707	\$ 117,642	\$ 747,065	\$ 17,181,539

### State Breakdown of Combined Benefits, Costs, and Net Benefits Over the Next 10 Years

#### Taxes and Revenue

Gross Receipt Taxes	\$ 6,521,295
Personal Income Taxes	\$ 11,373,982
Corporate Income Taxes	\$ -
Misc. Taxes and Revenue	\$ 204,802
<b>Subtotal of Benefits</b>	<b>\$ 18,100,079</b>

#### Costs

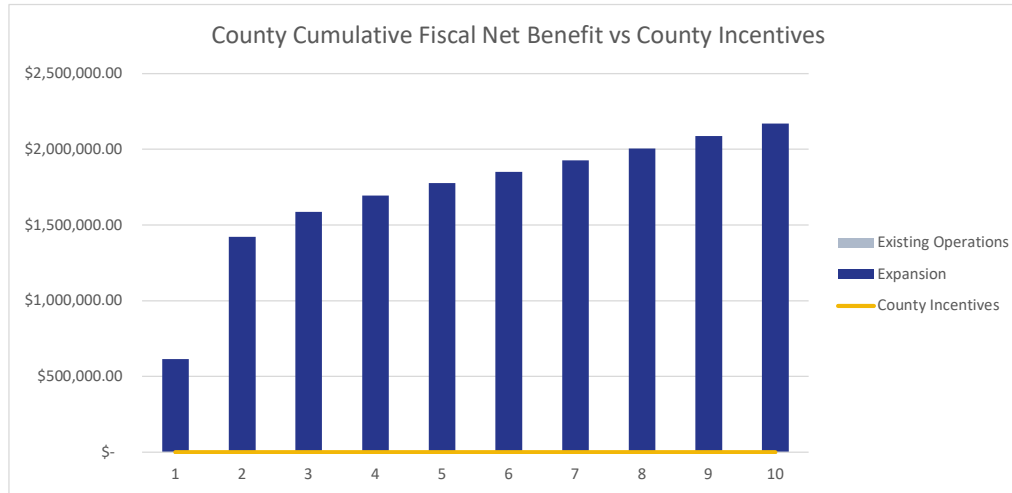
Costs	\$ 918,540
<b>Subtotal of Costs</b>	<b>\$ 918,540</b>

#### Net Benefits

<b>Net Benefits</b>	<b>\$ 17,181,539</b>
<b>Present Value</b>	<b>\$ 15,457,481</b>

# County Impacts





### Incentives

Total County Incentive:	\$	-
County Incentive Per Job:	\$	-

### Combined Payback and Return

County Payback Period Combined:	-	Years
County Rate of Return Combined:	N/A	

### Expansion Only Payback and Return

County Payback Period Expansion:	-	Years
County Rate of Return Expansion:	N/A	

### County Net Benefits Of Current Operations

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -

### County Net Benefits Of Expansion

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 619,212	\$ 3,907	\$ 615,305	\$ 615,305
2	\$ 814,466	\$ 8,033	\$ 806,433	\$ 1,421,738
3	\$ 177,412	\$ 10,935	\$ 166,477	\$ 1,588,215
4	\$ 119,308	\$ 13,250	\$ 106,058	\$ 1,694,273
5	\$ 96,635	\$ 14,290	\$ 82,345	\$ 1,776,618
6	\$ 88,969	\$ 14,690	\$ 74,278	\$ 1,850,896
7	\$ 91,574	\$ 15,102	\$ 76,472	\$ 1,927,368
8	\$ 94,255	\$ 15,524	\$ 78,730	\$ 2,006,099
9	\$ 97,015	\$ 15,959	\$ 81,056	\$ 2,087,155
10	\$ 99,857	\$ 16,406	\$ 83,451	\$ 2,170,605

### County Combined Net Benefits

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 619,212	\$ 3,907	\$ 615,305	\$ 615,305
2	\$ 814,466	\$ 8,033	\$ 806,433	\$ 1,421,738
3	\$ 177,412	\$ 10,935	\$ 166,477	\$ 1,588,215
4	\$ 119,308	\$ 13,250	\$ 106,058	\$ 1,694,273
5	\$ 96,635	\$ 14,290	\$ 82,345	\$ 1,776,618
6	\$ 88,969	\$ 14,690	\$ 74,278	\$ 1,850,896
7	\$ 91,574	\$ 15,102	\$ 76,472	\$ 1,927,368
8	\$ 94,255	\$ 15,524	\$ 78,730	\$ 2,006,099
9	\$ 97,015	\$ 15,959	\$ 81,056	\$ 2,087,155
10	\$ 99,857	\$ 16,406	\$ 83,451	\$ 2,170,605

### County Breakdown of Combined Benefits, Costs, and Net Benefits Over the Next 10 Years

#### Taxes and Revenue

Gross Receipt Taxes	\$ 2,121,654
Misc. Taxes and Revenue	\$ 151,516
Property Taxes	\$ 25,532
<b>Subtotal of Benefits</b>	<b>\$ 2,298,702</b>

#### Costs

Costs	\$ 128,097
<b>Subtotal of Costs</b>	<b>\$ 128,097</b>

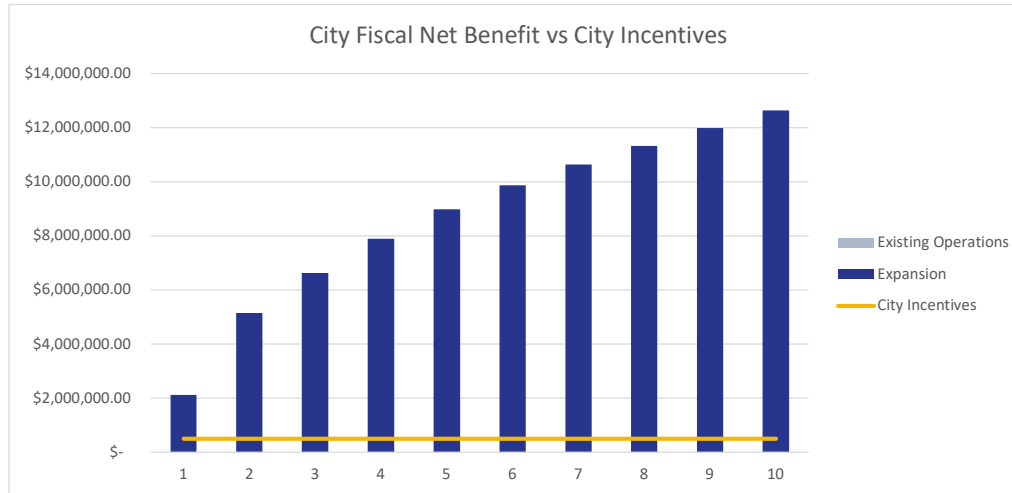
#### Net Benefits

<b>Net Benefits</b>	<b>\$ 2,170,605</b>
<b>Present Value</b>	<b>\$ 1,973,569</b>

# City Impacts







### Incentives

Total City Incentive:	\$	500,000
City Incentive Per Job:	\$	5,000

### Combined Payback and Return

City Payback Period Combined:	0.24	Years
City Rate of Return Combined:	2092%	

### Expansion Only Payback and Return

City Payback Period Expansion:	0.24	Years
City Rate of Return Expansion:	2092%	

### City Net Benefits Of Current Operations

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -

### City Net Benefits Of Expansion

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 2,113,014	\$ (5,782)	\$ 2,118,796	\$ 2,118,796
2	\$ 3,038,183	\$ 6,248	\$ 3,031,935	\$ 5,150,731
3	\$ 1,493,023	\$ 13,735	\$ 1,479,288	\$ 6,630,019
4	\$ 1,282,982	\$ 20,275	\$ 1,262,708	\$ 7,892,727
5	\$ 1,110,167	\$ 21,434	\$ 1,088,733	\$ 8,981,460
6	\$ 910,886	\$ 21,956	\$ 888,930	\$ 9,870,390
7	\$ 790,618	\$ 22,491	\$ 768,127	\$ 10,638,516
8	\$ 708,041	\$ 23,038	\$ 685,002	\$ 11,323,519
9	\$ 682,775	\$ 23,598	\$ 659,176	\$ 11,982,695
10	\$ 681,721	\$ 24,171	\$ 657,550	\$ 12,640,245

### City Combined Net Benefits

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 2,113,014	\$ (5,782)	\$ 2,118,796	\$ 2,118,796
2	\$ 3,038,183	\$ 6,248	\$ 3,031,935	\$ 5,150,731
3	\$ 1,493,023	\$ 13,735	\$ 1,479,288	\$ 6,630,019
4	\$ 1,282,982	\$ 20,275	\$ 1,262,708	\$ 7,892,727
5	\$ 1,110,167	\$ 21,434	\$ 1,088,733	\$ 8,981,460
6	\$ 910,886	\$ 21,956	\$ 888,930	\$ 9,870,390
7	\$ 790,618	\$ 22,491	\$ 768,127	\$ 10,638,516
8	\$ 708,041	\$ 23,038	\$ 685,002	\$ 11,323,519
9	\$ 682,775	\$ 23,598	\$ 659,176	\$ 11,982,695
10	\$ 681,721	\$ 24,171	\$ 657,550	\$ 12,640,245

### City Breakdown of Combined Benefits, Costs, and Net Benefits Over the Next 10 Years

#### Taxes and Revenue

Gross Receipt Taxes	\$ 4,981,057
Misc. Taxes and Revenue	\$ 514,686
Property Taxes	\$ 7,315,668
<b>Subtotal of Benefits</b>	<b>\$ 12,811,410</b>

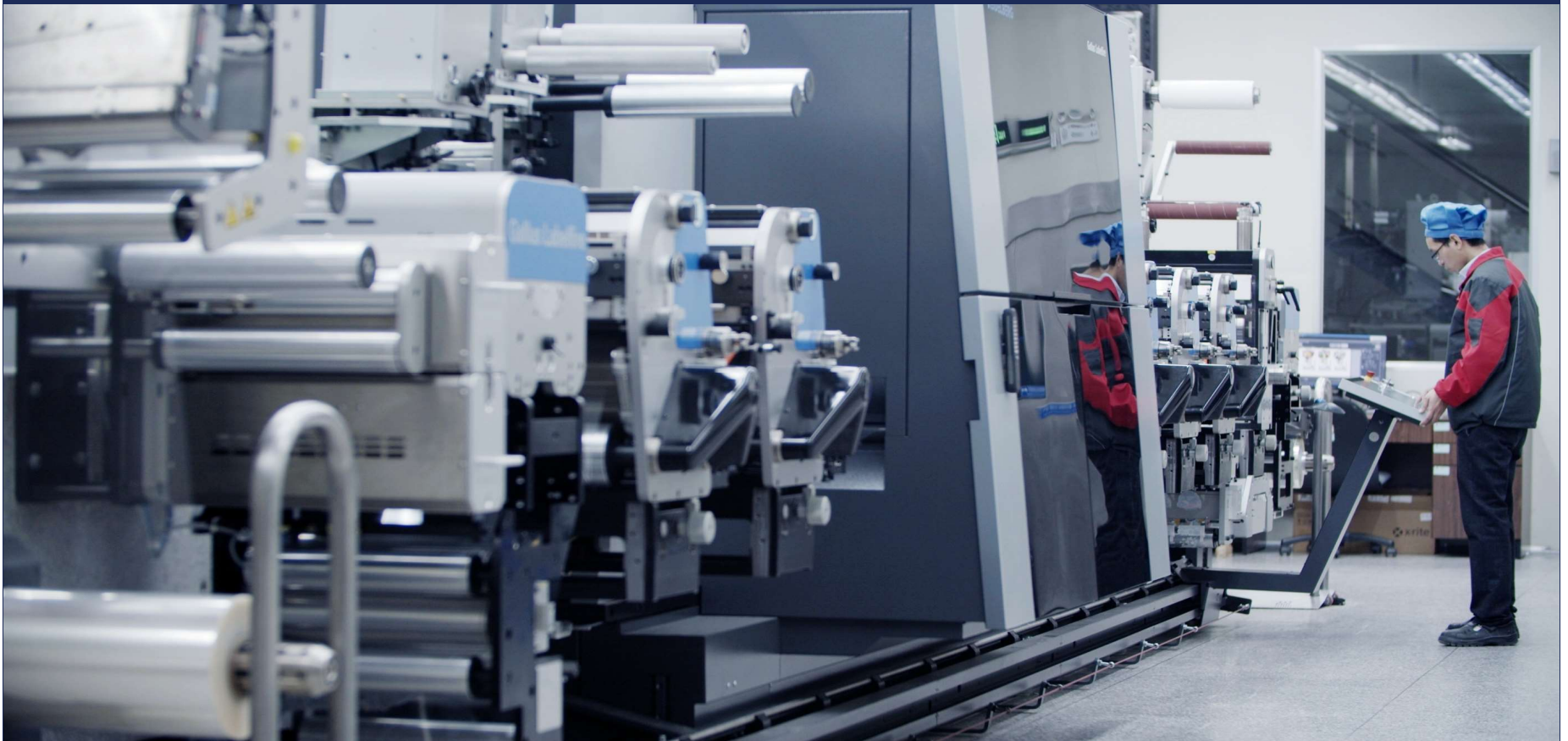
#### Costs

Costs	\$ 171,165
<b>Subtotal of Costs</b>	<b>\$ 171,165</b>

#### Net Benefits

<b>Net Benefits</b>	<b>\$ 12,640,245</b>
<b>Present Value</b>	<b>\$ 10,961,114</b>

# Special Taxing District and Public Schools





# Special Taxing District

## Special Taxing District Net Benefits of Current Operations

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ -	\$ -	\$ -	\$ -
2	\$ -	\$ -	\$ -	\$ -
3	\$ -	\$ -	\$ -	\$ -
4	\$ -	\$ -	\$ -	\$ -
5	\$ -	\$ -	\$ -	\$ -
6	\$ -	\$ -	\$ -	\$ -
7	\$ -	\$ -	\$ -	\$ -
8	\$ -	\$ -	\$ -	\$ -
9	\$ -	\$ -	\$ -	\$ -
10	\$ -	\$ -	\$ -	\$ -

## Special District Net Benefits of Expansion

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 1,543	\$ -	\$ 1,543	\$ 1,543
2	\$ 3,116	\$ -	\$ 3,116	\$ 4,659
3	\$ 4,207	\$ -	\$ 4,207	\$ 8,865
4	\$ 5,062	\$ -	\$ 5,062	\$ 13,927
5	\$ 5,420	\$ -	\$ 5,420	\$ 19,348
6	\$ 5,529	\$ -	\$ 5,529	\$ 24,876
7	\$ 5,639	\$ -	\$ 5,639	\$ 30,516
8	\$ 5,752	\$ -	\$ 5,752	\$ 36,268
9	\$ 5,867	\$ -	\$ 5,867	\$ 42,135
10	\$ 5,985	\$ -	\$ 5,985	\$ 48,120

## Special District Combined Net Benefits

Year	Benefits	Costs	Net Benefits	Cumulative Net Benefits
1	\$ 1,543	\$ -	\$ 1,543	\$ 1,543
2	\$ 3,116	\$ -	\$ 3,116	\$ 4,659
3	\$ 4,207	\$ -	\$ 4,207	\$ 8,865
4	\$ 5,062	\$ -	\$ 5,062	\$ 13,927
5	\$ 5,420	\$ -	\$ 5,420	\$ 19,348
6	\$ 5,529	\$ -	\$ 5,529	\$ 24,876
7	\$ 5,639	\$ -	\$ 5,639	\$ 30,516
8	\$ 5,752	\$ -	\$ 5,752	\$ 36,268
9	\$ 5,867	\$ -	\$ 5,867	\$ 42,135
10	\$ 5,985	\$ -	\$ 5,985	\$ 48,120

# Public Schools

## Public Schools Net Benefits of Current Operations

Year	Benefits		Costs		Net Benefits		Cumulative Net Benefits
1	\$	-	\$	-	\$	-	\$ -
2	\$	-	\$	-	\$	-	\$ -
3	\$	-	\$	-	\$	-	\$ -
4	\$	-	\$	-	\$	-	\$ -
5	\$	-	\$	-	\$	-	\$ -
6	\$	-	\$	-	\$	-	\$ -
7	\$	-	\$	-	\$	-	\$ -
8	\$	-	\$	-	\$	-	\$ -
9	\$	-	\$	-	\$	-	\$ -
10	\$	-	\$	-	\$	-	\$ -

## Public Schools Net Benefits of Expansion

Year	Benefits		Costs		Net Benefits		Cumulative Net Benefits
1	\$	1,023	\$	-	\$	1,023	\$ 1,023
2	\$	2,066	\$	-	\$	2,066	\$ 3,089
3	\$	2,789	\$	-	\$	2,789	\$ 5,878
4	\$	3,356	\$	-	\$	3,356	\$ 9,234
5	\$	3,594	\$	-	\$	3,594	\$ 12,828
6	\$	3,666	\$	-	\$	3,666	\$ 16,493
7	\$	3,739	\$	-	\$	3,739	\$ 20,232
8	\$	3,814	\$	-	\$	3,814	\$ 24,046
9	\$	3,890	\$	-	\$	3,890	\$ 27,936
10	\$	3,968	\$	-	\$	3,968	\$ 31,904

## Public Schools Combined Net Benefits

Year	Benefits		Costs		Net Benefits		Cumulative Net Benefits
1	\$	1,023	\$	-	\$	1,023	\$ 1,023
2	\$	2,066	\$	-	\$	2,066	\$ 3,089
3	\$	2,789	\$	-	\$	2,789	\$ 5,878
4	\$	3,356	\$	-	\$	3,356	\$ 9,234
5	\$	3,594	\$	-	\$	3,594	\$ 12,828
6	\$	3,666	\$	-	\$	3,666	\$ 16,493
7	\$	3,739	\$	-	\$	3,739	\$ 20,232
8	\$	3,814	\$	-	\$	3,814	\$ 24,046
9	\$	3,890	\$	-	\$	3,890	\$ 27,936
10	\$	3,968	\$	-	\$	3,968	\$ 31,904

# Property Tax Exemptions and Industrial Revenue Bonds



### Property Tax Exemptions and Industrial Revenue Bonds

The City and/or the County is considering abating taxes on the Project's property. Below is a table that identifies the types of property that are under consideration for property tax abatement:

Land:	Yes
Building and Property Improvements:	Yes
Furniture, Fixtures and Equipment:	Yes

### Property Tax Percentage Exemptions On Land and Building

County	City	Schools	Special Taxing District
75%	75%	75%	75%

### Property Tax Percentage Exemptions On Furniture, Fixtures and Equipment

County	City	Schools	Special Taxing District
75%	75%	75%	75%

Value of Exemption Through 10 Years:	<b>\$ 6,801,561</b>	<b>\$ 6,411,946</b>	<b>\$ 435,999</b>	<b>\$ 688,611</b>
*Value of Payment in Lieu of Taxes Through 10 Years:	<b>\$ -</b>	<b>\$ 7,281,898</b>	<b>\$ -</b>	<b>\$ -</b>

\*The model assumes that the payment in lieu of taxes will be administered to the either the county or city, and the local government will disperse the amounts to the appropriate districts.

### Percentage of Gross Receipt Taxes Foregone on Newly Purchased Furniture, Fixtures and Equipment Over 10 Years

Year	State	County	City
1	100%	100%	100%
2	100%	100%	100%
3	100%	100%	100%
4	100%	100%	100%
5	100%	100%	100%
6	100%	100%	100%
7	100%	100%	100%
8	100%	100%	100%
9	100%	100%	100%
10	100%	100%	100%
Value of Exemption Through 10 Years:	<b>\$ 7,066,510</b>	<b>\$ 2,299,036</b>	<b>\$ 5,396,684</b>

2024	2025	2026	2028
Year 1	Year 2	Year 3	Year 5
3,006,900	2,515,063	1,853,498	545,872
3,006,900	5,521,963	7,375,461	9,266,152

Yearly Payroll Projection  
Cumulative

Starting Headcount 134

Job Title	Year 1	Avg Salary	Year 1 Salary	Year 2	Avg Salary	Year 2 Salary	Year 3	Avg Salary	Year 3 Salary	Year 4	Avg Salary	Year 4 Salary	Year 5	Avg Salary	Year 5 Salary	Total
Operator	2	73,000	146,000	7	75,190	526,330	6	77,446	464,674	3	79,769	239,307	-	82,162	-	18
Tech Coordinator	1	73,900	73,900	-	76,117	-	-	78,401	-	-	80,753	-	-	83,175	-	1
QA Lead Role	1	69,500	69,500	-	71,585	-	-	73,733	-	-	75,945	-	-	78,223	-	1
Day Lab Chemist	2	89,700	179,400	-	92,391	-	-	95,163	-	-	98,018	-	-	100,958	-	2
Maintenance Coordinator	-	47,100	-	1	48,513	48,513	-	49,968	-	-	51,467	-	-	53,011	-	1
PDL Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
CDL CVD Engineer	1	150,000	150,000	-	154,500	-	-	159,135	-	-	163,909	-	-	168,826	-	1
WML Test Engineer	1	130,000	130,000	-	133,900	-	-	137,917	-	-	142,055	-	-	146,316	-	1
I&C Engineer	-	130,000	-	-	133,900	-	1	137,917	137,917	-	142,055	-	-	146,316	-	1
TDL Automation Engineer	1	150,000	150,000	-	154,500	-	-	159,135	-	-	163,909	-	-	168,826	-	1
KDL Test Engineer	-	126,214	-	1	130,000	130,000	-	133,900	-	-	137,917	-	-	142,055	-	1
TDL Technologist	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
TDL Technologist	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
TDL Technologist	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
KDL Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
CDL Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
WML Operator	-	77,670	-	1	80,000	80,000	-	82,400	-	-	84,872	-	-	87,418	-	1
Fuels Fellow	-	194,175	-	1	200,000	200,000	-	206,000	-	-	212,180	-	-	218,545	-	1
Characterization Lead	1	102,000	102,000	-	105,060	-	-	108,212	-	-	111,458	-	-	114,802	-	1
Characterization Tech	-	72,816	-	1	75,000	75,000	-	77,250	-	-	79,568	-	-	81,955	-	1
Characterization Tech	-	72,816	-	1	75,000	75,000	-	77,250	-	-	79,568	-	-	81,955	-	1
SPF Manufacturing - Accelerated Fabricator Onboarding	2	95,000	190,000	-	97,850	-	-	100,786	-	1	103,809	103,809	-	106,923	-	3
Fabricators	2	95,000	190,000	2	97,850	195,700	2	100,786	201,571	2	103,809	207,618	2	106,923	213,847	10
Machinists	2	97,500	195,000	2	100,425	200,850	2	103,438	206,876	5	106,541	532,704	2	109,737	219,474	13
Quality Control Technician	2	100,000	200,000	1	103,000	103,000	1	106,090	106,090	1	109,273	109,273	1	112,551	112,551	6
Planners	2	90,000	180,000	-	92,700	-	-	95,481	-	-	98,345	-	-	101,296	-	2
Machine Operator	2	75,000	150,000	-	77,250	-	-	79,568	-	-	81,955	-	-	84,413	-	2
Leader CatchAll (Supervisor, Managers, Director)	3	175,000	525,000	-	180,250	-	1	185,658	185,658	-	191,227	-	-	196,964	-	4
Helpers	1	46,400	46,400	1	47,792	47,792	1	49,226	49,226	3	50,703	152,108	-	52,224	-	6
Mechanical Technologist (Mod Skid)	-	74,100	-	3	76,323	228,969	3	78,613	235,838	-	80,971	-	-	83,400	-	6
Construction Manager	1	85,300	85,300	-	87,859	-	1	90,495	90,495	-	93,210	-	-	96,006	-	2
Engineer	1	95,600	95,600	-	98,468	-	1	101,422	101,422	-	104,465	-	-	107,599	-	2
Process Pipling Quality Assurance	1	50,800	50,800	1	52,324	52,324	-	53,894	-	-	55,511	-	-	57,176	-	2
Construction Procurement Specialist	1	98,000	98,000	-	100,940	-	-	103,968	-	-	107,087	-	-	110,300	-	1
Reviewing design(s)	-	69,500	-	1	71,585	71,585	1	73,733	73,733	-	75,945	-	-	78,223	-	2
<b>Total</b>	<b>30</b>		<b>3,006,900</b>	<b>30</b>		<b>2,515,063</b>	<b>20</b>		<b>1,853,498</b>	<b>15</b>		<b>1,344,819</b>	<b>5</b>		<b>545,872</b>	<b>100</b>



707 West Tower Avenue, Suite A  
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**April 17, 2024**

**State of New Mexico**

To Whom It May Concern,

Kairos Power LLC's expansion project in the state for the New Mexico is expected to have a capital investment of approximately \$300,000,000. The finance plan for the project is a 50/50 split from two sources: the company's award from the U.S. Department of Energy under the Advanced Reactor Demonstration Program (ARDP), and the remainder coming from the existing private investors.

Best regards,

A handwritten signature in blue ink that reads "Linda N. Schenk".

Linda Schenk  
Vice President, Financial Operations  
Kairos Power

## CURRICULUM VITAE

Michael R. Laufer

Kairos Power LLC

580 2nd Street, Suite 290

Oakland, CA 94607

Phone: 631-921-5713

Email: laufer@kairos-power.com

## RESEARCH INTERESTS

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Thermal-hydraulics in the design of advanced nuclear reactor concepts, coupled granular and fluid dynamics, nuclear reactor safety and licensing, probabilistic risk assessment, performance-based regulation, and simulation verification and validation.

## EDUCATION

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- 2007-2013 **University of California, Berkeley.** Berkeley, CA  
Ph.D. in Nuclear Engineering, Completed in Spring 2013.  
Thesis Title: *Granular Dynamics in Pebble Bed Reactor Cores*
- 2002-2006 **Stanford University.** Palo Alto, CA  
B.S. in Mechanical Engineering with Honors in International Security Studies, June 2006.

## PROFESSIONAL AND RESEARCH EXPERIENCE

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- 2016-Present **Kairos Power LLC.** *Co-Founder and Chief Executive Officer.* Oakland, CA  
Responsible for high level strategy and operations in nuclear energy technology and engineering company with a focus on commercialization of the Fluoride Salt-Cooled High-Temperature Reactor (FHR).
- 2013-2016 **University of California, Berkeley.** *Postdoctoral Scholar.* Berkeley, CA  
Thermal Hydraulics Laboratory, Department of Nuclear Engineering
- 2006-2007 **Electric Power Research Institute.** *Student Employee.* Palo Alto, CA  
Student employee in Nuclear Program.
- 2005 **Carnegie Endowment for International Peace.** *Intern.* Washington, DC  
Summer intern and research assistant at the Carnegie Non-Proliferation Project.
- 2002, 2004 **Ducati Corse.** *Intern.* Bologna, Italy  
Summer technical intern in the racing division of Ducati Motorcycles.
- 2001 **State University of New York, Stony Brook.** *Research Assistant.* Stony Brook, NY  
Mentored by Prof. Ralph Wijers of SUNY Stony Brook Astronomy Department.

## SELECTED PUBLICATIONS AND PROCEEDINGS

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- C. Andreades, A.T. Cisneros, J.K. Choi, A. Chong, M. Fratoni, S. Hong, L.R. Huddar, K.D. Huff, J. Kendrick, D.L. Krumwiede, M.R. Laufer, M. Munk, R.O. Scarlat, N. Zweibaum, E. Greenspan, X. Wang, and P.F. Peterson, "Design Summary of the Mark-I Pebble-Bed Fluoride Salt-Cooled, High-Temperature Reactor Commercial Power Plant," *Nuclear Technology*, Vol. 195, No. 3, September 2016.
- G.C. Buster, M.R. Laufer, and P.F. Peterson, "A Scaled Experimental Study of Control Blade Insertion Dynamics in Pebble-Bed Fluoride-Salt-Cooled High-Temperature Reactors," *Nuclear Engineering and Design*, Vol. 303, July 2016.
- G.C. Buster, M.R. Laufer, and P.F. Peterson, "Fracture Analysis of Reduced Diameter Spherical Graphite Fuel Elements under Diametrical Loading Conditions," UCBTH-15-004, University of California, Berkeley, May 2015.
- M.R. Laufer and G.C. Buster, "X-Ray Pebble Recirculation Experiment (X-PREX) Design and Initial Experimental Results," UCBTH-15-002, University of California, Berkeley, January 2015.
- R.O. Scarlat, M.R. Laufer, E.D. Blandford, N. Zweibaum, D.L. Krumwiede, A.T. Cisneros, C. Andreades, C.W. Forsberg, E. Greenspan, L. Hu, and P.F. Peterson, "Design and Licensing Strategies for the Fluoride-Salt-Cooled, High-Temperature Reactor (FHR) Technology," *Progress in Nuclear Energy*, Vol. 77, November 2014.
- N. Zweibaum, G. Cao, A.T. Cisneros, B. Kelleher, M.R. Laufer, R.O. Scarlat, J.E. Seifried, M.H. Anderson, C.W. Forsberg, E. Greenspan, L. Hu, P.F. Peterson, and K. Sridharan, "Phenomenology, Methods, and Experimental Programs for Fluoride-Salt-Cooled, High Temperature, Reactors (FHRs)," *Progress in Nuclear Energy*, Vol. 77, November 2014.
- M.R. Laufer, J.E. Bickel, G.C. Buster, D.L. Krumwiede, and P.F. Peterson, "The X-Ray Pebble Recirculation Experiment (X-PREX): Facility Description, Preliminary Discrete Element Method Simulation Validation Studies, and Future Test Program," Proceedings of International Topical Meeting on High Temperature Reactor Technology (HTR 2014), Weihai, China, October 27-31, 2014.
- C. Charalampos, A.T. Cisneros, J.K. Choi, A. Chong, M. Fratoni, S. Hong, L.R. Huddar, K.D. Huff, D.L. Krumwiede, M.R. Laufer, M. Munk, R.O. Scarlat, N. Zweibaum, E. Greenspan, P.F. Peterson, "Technical Description of the 'Mark 1' Pebble-Bed Fluoride-Salt-Cooled High-Temperature Reactor (PB-FHR) Power Plant," UCBTH-14-002, University of California, Berkeley September 2014.
- P.F. Peterson, M.R. Laufer, and E.D. Blandford, "Nuclear Freeze: Why Nuclear Power Has Stalled – And How to Restart It," *Foreign Affairs*, Vol. 93, No. 3, May/June, 2014.
- R.O. Scarlat, M.R. Laufer, and A.T. Cisneros, "Preliminary Fluoride Salt-Cooled High Temperature Reactor (FHR) Subsystems Definition, Functional Requirements Definition, and Licensing Basis Event (LBE) Identification White Paper", UCBTH-12-001, University of California, Berkeley, February 2012.
- M.R. Laufer, E.D. Blandford, P.F. Peterson, "Overview of the Technology Development Path and Experimental Program for the Pebble-Bed Advanced High Temperature Reactor," Proceedings of International Conference on Emerging Nuclear Energy Systems (ICENES 2011), San Francisco, California, USA, May 15-19, 2011.
- J.E. Bickel, M.R. Laufer, L. Li, A.T. Cisneros, and P.F. Peterson, "Conceptual Design, Experiments, and Analysis for the Core of an FHR-16 Test Reactor," Proceedings of International Congress on Advances in Nuclear Power Plants (ICAPP '10), San Diego, California, USA, June 13-17, 2010.



## CURRICULUM VITAE

Edward D. Blandford  
Kairos Power, 707A W Tower Ave., Alameda, CA 94501  
(510) 506-2875 (office), (415) 793-1083 (mobile)  
Email: blandford@kairospower.com

### EDUCATION:

- Ph.D. 2010 *Physical Similitude of Hierarchical Engineered Systems*  
Prof. P. F. Peterson (research advisor), University of California, Berkeley, Nuclear Engineering
- M.S. 2008 University of California, Berkeley, Nuclear Engineering
- B.S. 2002 University of California, Los Angeles, Mechanical Engineering

### PROFESSIONAL EXPERIENCE:

- 2017- Co-founder and Chief Technology Officer, Kairos Power
- 2012-2016 Assistant Professor, University of New Mexico, Nuclear Engineering Department
- 2011-2012 Adjunct Research Assistant Professor, University of New Mexico, Nuclear Engineering Department
- 2011-2012 Stanton Nuclear Security Fellow at CISAC, Stanford University
- 2010-2011 Postdoctoral Fellow at CISAC, Stanford University
- 2007-2010 Graduate Student Researcher, University of California, Berkeley, Nuclear Engineering
- 2003-2006 Project Manager, Steam Generator Management Program, Electric Power Research Institute, Palo Alto, California
- 2002-2003 Member of the Technical Staff, Fuel Reliability Program, Electric Power Research Institute, Palo Alto, California

### RESEARCH INTERESTS:

Nuclear reactor thermal-hydraulics in support of the safety of nuclear installations, probabilistic risk assessment, safeguards approaches for reprocessing facilities, physical protection strategies, best-estimate code validation and verification, and various topics in heat and mass transfer, fluid dynamics, and phase change.

### RELEVANT PROFESSIONAL ACTIVITIES AND CONSULTING EXPERIENCE:

- 2014 Consultant to Mitsubishi Heavy Industries
- 2014 Chair, ANS Nuclear Installations Safety Division Program Committee
- 2013 Member of Independent Review of SONGS Unit 2 Restart Plans, Consultant to California Energy Commission
- 2010 Member of ANS President's Special Committee on SMR Generic Licensing Issues
- 2006 Member of Oconee Steam Generator Excessive Wear Root Cause Committee, Consultant to Duke Energy, Mississauga, Toronto

**Per F. Peterson**  
**Chief Nuclear Officer**  
**Kairos Power**  
**peterson@kairospower.com**

**Education**

Ph.D. (1988) Mechanical Engineering, University of California, Berkeley.  
MSME (1986) Mechanical Engineering, University of California, Berkeley.  
BSME (1982) Mechanical Engineering, University of Nevada, Reno.

**Research and Professional Experience**

7/17- Chief Nuclear Officer, Kairos Power, LLC, Oakland CA  
7/98- Professor - Nuclear Engineering Department, U.C. Berkeley  
Research and teaching in heat and mass transfer, multi-phase/multi-component flows, thermal hydraulics, reactor safety, and nuclear materials management.  
12/99- Mechanical Engineering Faculty Member, Lawrence Berkeley National Laboratory, Accelerator and Fusion Research Division  
1/15-7/17 Executive Associate Dean, College of Engineering, U.C. Berkeley  
7/00-7/05, Chair - Nuclear Engineering Department, U.C. Berkeley  
7/09-7/12  
7/98-9/00 Chair, Energy and Resources Group, U.C. Berkeley  
7/94-6/98 Associate Professor - Nuclear Engineering Department, U.C. Berkeley  
6/90-6/94 Assistant Professor - Nuclear Engineering Department, U.C. Berkeley  
6/89-5/90 JSPS Fellow - Tokyo Institute of Technology.  
Japan Society for the Promotion of Science Fellow.  
9/88-5/89 Assistant Specialist - Mechanical Engineering Department, U.C. Irvine.  
Heat transfer research and teaching.  
6/88-8/88 Guest Researcher - Tokyo Institute of Technology.  
Research on reflux thermosyphons with multi-species mixtures.  
8/85-5/88 Research Assistant - Mechanical Engineering Department, U.C. Berkeley.  
Doctoral research in heat and mass transfer in condensing systems.  
5/82-6/85 Engineer - Bechtel National, Inc., San Francisco, California  
Design of systems for processing (vitrifying) high-level nuclear waste.

**Selected Publications (from 110 archival journal and 140 peer-reviewed conference proceedings)**

1. P.F. Peterson, "Theoretical Basis for the Uchida Correlation for Condensation In Reactor Containments," *Nuclear Engineering and Design*, Vol. 162, pp. 301-306, 1996.
2. P.F. Peterson, V.E. Schrock, and R. Greif, "Scaling for Integral Simulation of Mixing in Large, Stratified Volumes," *Nuclear Engineering and Design*, Vol. 186, pp. 213-224, 1998.
3. J. Woodcock, P.F. Peterson, D.R. Spencer, "Quantifying the Effects of Break Source Flow Rates on AP600 Containment Stratification," *Nuclear Technology*, Vol. 134, pp. 37-48, 2001.

4. C.W. Forsberg, P.F. Peterson, and P. Pickard, "Molten-Salt-Cooled Advanced High-Temperature Reactor for Production of Hydrogen and Electricity," *Nuclear Technology* Vol. 144, pp. 289-302 (2003).
5. R.O. Scarlat, A.T. Cisneros, T. Koutchesfahani, R. Hong, P.F. Peterson, "Preliminary Safety Analysis of a PBMR Supplying Process Heat to a Co-Located Ethylene Production Plant," *Nuclear Engineering and Design*, Vol. 251, pp. 53-59 (2012).
6. L. Huddar, R.O. Scarlat, N. Zweibaum and P.F. Peterson, "Overview of Passive Safety Features and Transient Model Validation for the Pebble-Bed Fluoride-Salt Cooled, High-Temperature Nuclear Reactor (PB-FHR)," 2013 AIChE Annual Meeting, Nuclear Energy and Sustainability Section, San Francisco, CA, November 3-8, 2013.
7. C. Andreades, R.O. Scarlat, L. Dempsey, and P.F. Peterson, "Reheat Air-Brayton Combined Cycle (RACC) Power Conversion Design and Performance Under Nominal Ambient Conditions," *ASME Journal of Engineering for Gas Turbines and Power*, vol. 136, No. 6, doi:10.1115/1.4026506 (2014).
8. N. Zweibaum, J. E. Bickel, Z. Guo, J. C. Kendrick, P. F. Peterson, "Design, Fabrication and Startup Testing of the Compact Integral Effects Test Facility in Support of Fluoride-Salt-Cooled, High Temperature Reactor Technology," International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-16), Chicago, IL, August 30-September 4, 2015.

### **Synergistic Activities**

- Member, U.S. Blue Ribbon Commission on America's Nuclear Future (2010-2012)
- Member, Evaluation Methodology Group (EMG), Generation IV Roadmap Project, 2001-2002.
- Co-chair, Proliferation Resistance and Physical Protection Working Group, Generation IV International Forum, 2002 - present.
- Member and Chair, Nuclear Science and Technology Division Advisory Committee, Oak Ridge National Laboratory, 2007 – (Chair 2013-2017)
- Member, Diablo Canyon Independent Safety Committee (2004-07, appointment by Attorney General of the State of California; 2008-present, appointment by Governor of the State of California).