#### ALBUQUERQUE DEVELOPMENT COMMISSION Industrial Revenue Bond Hearing

November 11, 2024

#### Case #2024-14 SolAero IRB

IRB-25-2: SolAero Technologies Corporation Project

**REQUEST:** Approval of \$72,600,000 in City Industrial Revenue Bonds is requested.

**PROJECT SUMMARY:** SolAero Technologies Corp. ("SolAero") is one of the world's leading manufacturers of highly-efficient radiation-hard solar cells and solar panels for space power applications. Since 2001, their solar cells or panels have supplied primary power to nearly 200 successful space missions with zero on-orbit failures The proposed project is an expansion and modernization of SolAero's compound semiconductor manufacturing capability and capacity of compound semiconductor production. The company is requesting \$72.6 million in City-issued industrial revenue bonds (IRB). City IRBs are issued to support eligible economic development projects that meet established policies and plans. The Company is responsible for funding the purchase of the bonds; no City funds are utilized to purchase or pay off the bonds, and no City credit is used to enhance the bonds. (The Company also is requesting assistance as a Local Economic Development Act—LEDA—Project, but that will be analyzed separately.)

The purpose of the proposed project is an expansion and modernization of SolAero's compound semiconductor manufacturing capability and capacity that is both sufficient to meet rapidly growing global demand and a significant improvement of the overall economics of compound semiconductor production. SolAero is seeking to build the facility at its existing site in the Sandia Science & Technology Park (SS&TP) located at 10420 Research Rd SE, and 1600 Eubank Blvd SE, Albuquerque, New Mexico 87123.

In June 2024, it was announced that the Department of Commerce and Rocket Lab, the parent company of space power provider SolAero Technologies Corp., agreed to terms to provide up to \$23.9M in direct funding under the CHIPS and Science Act. The proposed CHIPS investment would help create a more robust and resilient supply of space-grade solar cells that power spacecrafts and satellites. The modernization and expansion project would increase SolAero's compound semiconductor production by 50% within the next three years – helping to meet the growing national security and commercial demand for these solar cells in the United States.

The project will expand and modernize manufacturing capability, keep operations co-located in order to maximize technical, operational and industrial efficiency, and mitigate cost and schedule risks by minimizing new construction and leveraging existing facility systems. The project represents a \$72.6 million investment by the company by the end of 2028. SolAero will create at least 70 new high-paying economic base jobs.

The operations includes the building at 10420 Research Rd SE, and 1600 Eubank Blvd SE, Albuquerque, NM in the Sandia Science & Technology Park. The proposed use of the facility by the Company would not require a change in zoning. There are no particular environmental impacts associated with this Project.

The majority of the 70 new positions will be primarily engineering, project support and manufacturing positions, are considered full time positions, and come with full employee benefits with the company paying approximately 80% of basic healthcare premiums. The company anticipates that it will utilize the Job Training Incentive Program as part of its hiring plan.

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

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

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

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

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

This project includes a fiscal impact analysis prepared by the University of New Mexico's Bureau of Business and Economic Research (BBER). The fiscal impact determination of the Project is from information the Company provided. The fiscal impact presented shows that operations related to the \$72.6 million bond for SolAero CHIPS Project will generate an estimated total of almost \$11 million in taxes by 2043 and will continue to remain tax positive throughout the span of the contract. Moreover, as SolAero CHIPS Project continues to make positive contributions to the local economy and fosters partnerships with local entities, SolAero will continue to bring revenue to the City.

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

#### **FINDINGS:**

1. IRB 25-2 is a qualified project as defined by the State's Industrial Revenue Bond Act and the City enabling legislation (Resolution R-196, Sixth Council (126-1985) as amended by Resolution 350 Sixth Council; and

- 2. IRB 25-2 would make positive substantive contributions to the local economy and community by creating 70 high-wage economic base jobs; and
- 3. IRB 25-2 will improve Albuquerque's position in the forefront of advanced manufacturing and semiconductor manufacturing; and
- 4. IRB 25-2 would comply with the adopted City plans and policies, and meet community economic development priorities and objectives;
- 5. IRB 25-2 would adequately meet the evaluation criteria established by the City for Industrial Revenue Bond Act projects, including the requirement that the City recoup the value of its investment over the term of the bonds.

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

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

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

1. SolAero's revenue sources are to out-of-state entities and investors. The company also qualifies under the IRB Act and the City's Ordinance as:

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

- 2. The bonds will be considered a "self-purchase"-- purchased by a subsidiary or affiliate of the Company.
- 3. Current Zoning for the sites are NON-RESIDENTIAL BUSINESS PARK ZONE DISTRICT (NR-BP) and NON-RESIDENTIAL COMMERCIAL ZONE DISTRICT

(NR-C). No changes to zoning requested or required at this time.

- 4. SolAero has certified that it has no outstanding substantive federal, state, or local tax issues.
- 5. The Project, in its design, complies with environmental regulations. Permits are required for the renovations and new developments. Additional information regarding environmental implications is contained in the following section and in the Project Plan.
- 6. Jobs for the positions meet or exceed the median wages for similar jobs in the community. The salaries and positions are more fully described in Section II-7 and in the Application.
- 7. SolAero pays at least 50% percent of the health and dental insurance premiums for its employees (the company pays ~80%).

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

1. PLAN & ZONING:

Legal Description

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

The proposed project is located at 10420 Research Rd SE, Albuquerque, New Mexico 87123 and 1600 Eubank Blvd SE, Albuquerque, New Mexico 87123. The UPCs for the project site are 102105505041520166 and 102105504637420115L1, respectively, and the abbreviated legal descriptions for each are LOT 2-A BLOCK 4 PLAT OF LOT 2-A IN BLOCK 4 SANDIARESEARCH PARK CONT 7.0406 AC and TR A PLAT FOR TRACTS A & B EMCORE DEVELOPEMENTCONT 8.9380 AC, respectively.

#### **Prevailing Site Conditions**

Site is used for production of solar cells that are used on satellite solar panels for power creation. The project to add metal organic chemical vapor deposition (MOCVD) reactors and additional production equipment will take place internal to the current structures at SolAero. There may be new Power Switch Gear added and rooftop air handlers, but the physical structure will be unchanged.

Aerial photographs of the SolAero parcel. In the left photo the area shown in black is the northeastern corner of Kirtland Air Force Base and Sandia National Laboratory. The balance of the area shown is the Sandia National Laboratory Science and Technology Park. The right photo is a perspective view of the SolAero site.



#### **Present Assessed Value**

The current 2023 assessed property values is \$36,418,847. The valuation information is from the Bernalillo County Assessor website.

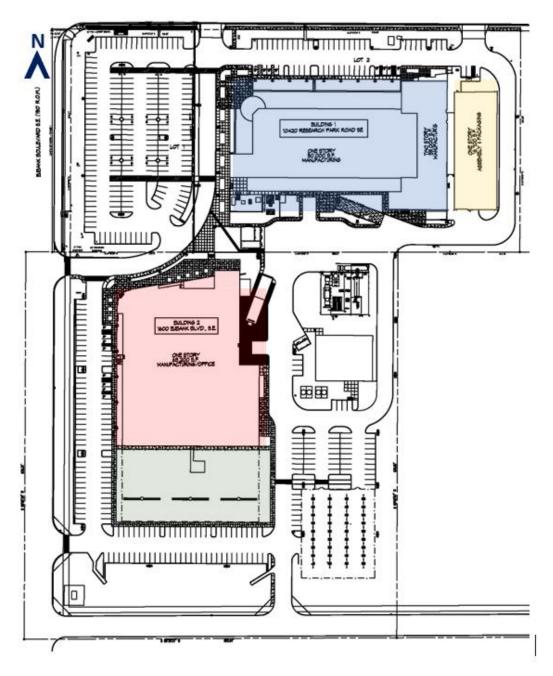
#### **Present and Proposed Zoning**

Current Zoning for the sites are NON-RESIDENTIAL – BUSINESS PARK ZONE DISTRICT (NR-BP) and NON-RESIDENTIAL – COMMERCIAL ZONE DISTRICT (NR-C). No changes to zoning requested or required at this time.

2. LAND USE:

The project will expand and modernize manufacturing capability, keep operations co-located in order to maximize technical, operational and industrial efficiency, and mitigate cost and schedule risks by minimizing new construction and leveraging existing facility systems. To size capital investment for the project, SolAero used a parametric model to match tool capacities. As 5 MOCVD tools (i.e. wafer production capacity) are added, the model identifies production constraints and increments the corresponding FE and/or BE tool count. The total investment required to add 5 MOCVD tools of total capacity and modernize the facility and infrastructure is ~\$95.5M.

Schematic view of the current SolAero site. Building 1, shaded in blue, is 84,500 sq. ft. housing a 40,000 sq. ft. cleanroom for compound semiconductor production operations. To the east of Building 1 is 17,000 sq. ft. of Class 10000 cleanroom space for satellite solar panel manufacturing operations. Building 2, shaded in red, is 63,000 square feet housing a 40,000 sq. ft. open highbay for solar panel manufacturing operations. The area shaded in green below Building 2 is available for expansion of the facility.



3. <u>Competition</u>

There are only three suppliers of space-grade solar cells in the world and two in the US. There are no other manufacturers of compound semiconductor devices in the city of Albuquerque nor the state of New Mexico.

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

Project will be competed at our Albuquerque location and thus local city and state resources will be used to complete the project over the planned 4-year project schedule. This will include local architect and construction firms along with electrical and mechanical firms. An estimate of \$30M

of the project will be spent with local firms. SolAero customers are worldwide and the overall growth in the space industry will continue to grow and we will engage new customers that will benefit from our expansion and modernization project. No plan for spin off businesses or definable impact to the local industrial base at this time. 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 SolAero Project further supports the EDD's criteria for the use of incentives by Leveraging our Core Assets, Implementing Place-Based Strategies, Supporting Focused and Positive ROI Projects, and creating 70 high-paying Economic Base jobs.

5. INFILL:

Albuquerque's Sandia Science & Technology Park (SS&TP) is home to companies, engineers, and researchers involved in advancing new technologies. Currently 41 companies and organizations and over 2,000 employees reside in SS&TP's 340-acre high-tech campus. The SS&TP is in the high desert Manzano Mountain foothills of Albuquerque, New Mexico. The Park is strategically located east of Kirtland Air Force Base. It extends along the south end of Eubank Boulevard, adjacent to Sandia National Laboratories.



#### 6. DESIGN AND CONSERVATION:

The facility is an existing area designed as a science and technology park. 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.

Semiconductor manufacturing is a water-intense operation, and New Mexico's arid climate and limited water resource make conservation an imperative. In typical semiconductor manufacturing operations, ~40% of water use is for rinsing operations and another 40% is equally distributed between cleanroom HVAC systems and exhaust scrubbing systems. Thus, ~80% of the water utilization is related to manufacturing processes. In addition, in compound semiconductor manufacturing, it is common for wet chemistries (e.g. acids, rinsates) to contain contaminants such as arsenic, meaning water use and the potential for it to become a hazardous waste are high. To combat this problem, SolAero has made considerable investments in managing water use that enables recycling of over 30% of process water and complete segregation & treatment of hazardous rinsate.

First, SolAero segregated potentially hazardous aqueous waste streams from all other waste streams, a major infrastructure design change from how the facility was originally constructed. This immediately allowed all non-hazardous aqueous waste streams to be recycled, and SolAero implemented reuse programs for a variety of non-potable applications, including in cooling systems, scrubbers and other systems. This step also reduced the volume of water that required treatment by over 90% since the majority of process water is used in non-hazardous applications. Second, SolAero re-directed all potentially hazardous aqueous waste streams to an on-site treatment facility of SolAero's own design. There, all process contaminants and metals are precipitated and pressed into "cakes", and the aqueous effluent is treated to bring it into compliance with applicable discharge requirements. The "cakes" are suitable for landfill disposal and the aqueous effluent is discharged to the storm sewer, in accordance with SolAero's discharge permit. No aqueous waste is disposed of as hazardous waste despite the fact that over 30,000 gallons of water per day flow into various process operations.

#### 7. RENEWABLE ENERGY:

SolAero's local utility, PNM, offers solar energy programs in which participants can tie private sources of solar power to the electrical grid and/or pay PNM to have a portion of their solar power demand met by renewable sources. SolAero participates in both programs. SolAero is a partner in and the sole offtaker from a 2MW solar power installation located directly south of its facilities. The Company has signed a 25-year Purchased Power Agreement (PPA) with the field operator and PNM. PNM limits private, grid-tied sources of solar power to 1MW per electrical meter/address. SolAero installed \$375,000 of electrical switchgear to route incoming power from two separate utility feeders to each of SolAero's buildings and to tie 1MW of the solar power installation into each of those feeders. This enabled SolAero to operate its buildings on separate feeders, so that the entire factory would not be taken offline by the loss of one feeder or local substation, and to maximize utilization of the power produced by the 2MW installation. No additional solar power can be added to either of SolAero's buildings because they already operate at the maximum allowed by PNM. So, SolAero subscribes to PNM's Blue Sky program in which apportioned 100kWh "blocks" of electricity are sourced from solar and wind facilities

in New Mexico. As SolAero's demand for electricity grows in connection with the expansion of factory capacity contemplated in this Application, SolAero is committed to growing its subscriptions to the Blue Sky program commensurately

#### **III. ECONOMIC BENEFITS**

#### 1. COMPETITION:

There are only three suppliers of space-grade solar cells in the world and two in the US. There are no other manufacturers of compound semiconductor devices in the city of Albuquerque nor the state of New Mexico.

#### 2. JOBS:

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

Number and Types of Jobs Created

70 New Positions will be created over the span of the project. Engineering and Project Support Function early in the project and the manufacturing positions once the project is near completion to allow for additional capacity on the site. These new 70 positions will consist of:

- 14 design and engineering exempt professionals
- 39 manufacturing non-exempt personnel deployed across four work shifts
- 17 exempt and non-exempt personnel in quality assurance, logistics, and support roles

Exempt Engineering Professionals - \$90k to \$150k Annual Non-Exempt personnel - \$40K - \$50K Annual Exempt and Non-Exempt Quality, Logistics or Support Functions \$65K - \$90K Annual

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?

80%-90% of the new positions will be filled locally.

2) Will jobs benefit low- and moderate-income residents?

Yes. SolAero's CHIPS and Science Act award includes a statutory requirement for a Workforce Development Plan. SolAero's Workforce Development Plan includes a \$2M award to local workforce and economic development partner, New Space Nexus, as well as \$3M additional dollars to be invested in recruiting and on-the-job training, all in support of the project being funded. SolAero is a majority minority employer, sourcing more than 2/3rds of its ~400-person workforce from within New Mexico. By partnering with New Space Nexus, SolAero intends to expand its reach to underrepresented and underserved individuals and

communities within New Mexico. An additional statutory requirement for a CHIPS award is that the jobs created conform to the federal Good Jobs Principles. So, SolAero will be offering jobs with competitive pay, benefits and wraparound services to New Mexicans and investing in New Space Nexus to ensure those offers reach the broadest practical cross-section of New Mexican communities.

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

Yes. SolAero offers a minimum starting wage of \$15/hour, 25% higher than New Mexico's minimum wage of \$12/hour. Employees are entitled to pay increases based on job-training certifications, more than two dozen of which are available and each of which can be completed in 12-24 weeks. This is in addition to annual performance reviews in which employees receive Cost of Living plus merit adjustments and to promotions for which they can be nominated by management.

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

Yes. SolAero employs professional recruiters for all staff levels and uses recruitment & placement firms only as means of last resort. This enables SolAero to ensure that its policies, practices and standards for diversity, equity, inclusion, and accessibility are followed and enforced. In 2023, SolAero successfully closed an audit from the Office of Federal Contract Compliance Programs (OFCCP), which conducted a 3-year lookback on SolAero's hiring and labor practices. OFCCP had zero findings and concluded that SolAero's policies, practices, and standards for recruiting, hiring, compensating, promoting, and terminating women, minorities, and under-represented groups such as veterans, individuals with disabilities and members of the LGBTQ+ community meet all applicable federal standards. The audit also examined management support for affirmative action, diversity & inclusion, and evidence of the company's efforts to reach women, minorities and under-represented groups and concluded that the company engages in good faith efforts in all areas.

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

Yes. SolAero maintains robust on-the-job (OTJ) training programs and partners with state & local educational and workforce training organizations to develop and advance the skills of its employees. SolAero offers OTJ training & certification for all of its manufacturing operations, skills that are fungible across many R&D and manufacturing organizations, including Intel, Sandia National Laboratories, and others. SolAero offers all levels of training and certification, up to and including the train-the-trainer level, to the NASA Technical Standard NASA-STD-8739 series of workmanship standards, skills that are sought after by and fungible across virtually the entire aerospace and defense industry. SolAero also offers IPC J-Standard training & certification, again sought after by and fungible across virtually the entire electronics assembly industry. SolAero partners with the New Mexico Manufacturing Extension Partnership (NMMEP), a NIST MEP approved Center and official representative of the MEP National Network, to deliver comprehensive, proven solutions that advance U.S.

manufacturing. Finally, the company offers all employees an educational reimbursement benefit program that reimburses employees for qualifying post-secondary education opportunities that are successfully completed.

6) What stated advancement opportunities are there?

SolAero's CHIPS and Science Act award includes a statutory requirement for a Workforce Development Plan. As stated above, SolAero maintains robust on-the-job (OTJ) training programs and partners with state & local educational and workforce training organizations to develop and advance the skills of its employees.

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. Full- and part-time employees are eligible for benefits, including health, vision & dental care, 401k, guaranteed paid leave (two weeks/year, growing to five with tenure), pre-paid legal & counseling services, employer-paid life insurance with employee & family options, disability insurance, an on-site gym with free exercise classes and a company-sponsored weight loss program. The company pays ~80% of employees' basic healthcare premiums. SolAero also offers an Employee Stock Purchase Plan within which employees can purchase Rocket Lab stock at a 15% discount versus the prevailing market price.

3. LOCAL PURCHASING

The company submitted historical data for 2023 (shown below) for New Mexico based vendor payments and sales tax paid on those purchases. Forward looking projections indicate the production volume is increasing ~ 5-10% per year. Based on these projections local spending is forecasted to increase between 2-5% based on volume and another annual increase of 2.5% for inflation.

New Mexico Vendor Payments											
Expenditure Type		Invoice \$ Amt	Sales Tax \$ Amt								
CapEx		3,434,150.48		244,427.46							
Utilities		1,912,260.85		30,074.62							
Supplies		1,467,604.03		76,786.79							
Property Taxes		680,641.28		-							
Equipment Services		458,252.78		15,466.97							
(blank)		265,709.52		13,825.09							
<b>Professional Services</b>		259,580.02		13,805.36							
Chemical Services		158,503.09		6,218.13							
Employee Exp		114,699.39		-							
Waste services		87,806.42		-							
Insurance		81,769.00		4,972.94							
Lease		52,651.23		2,560.04							
Donations		11,838.16		-							
Grand Total	\$	8,985,466.25	\$	408,137.40							

#### **IV. PROJECT FEASIBILITY**

#### 1. COST/ FEASIBILITY/ FINANCING:

Cost of Improvements, Bond Amount and Private Financing

A summary of the project is as follows:

#### **Cost of Improvements**

SolAero anticipates \$21,100,000 in construction costs and \$51,500,000 in equipment costs associated with the project. The value of the existing buildings and equipment is estimated at \$[26,988,272+ Building 2 and Building 2 equipment].

SolAero anticipates an equity contribution of approximately \$32,183,875, CHIPS direct funding of approximately \$23,900,000, and investment tax credits of approximately \$19,316,125.

**Bond Amount -** SolAero is requesting a City-issued Industrial Revenue Bond in the amount of \$72,600,000.

#### **Project Financing**

SolAero anticipates an equity contribution of approximately \$32,183,875, CHIPS direct funding of approximately \$23,900,000, and investment tax credits of approximately \$19,316,125.

#### 2. DEVELOPER'S RECORD:

Founded in 1998 and headquartered in Albuquerque, New Mexico, SolAero's solar cells, solar panels, and composite structural products have supported more than 1,000 successful space missions with 100% reliability and mission success to date. Over the past two decades, SolAero's products have played key roles in some of the industry's most ambitious space missions, including supplying power to NASA's Parker Solar Probe and Mars Insight Lander, the largest solar array ever deployed on the surface of Mars, and several Cygnus Cargo Resupply Missions to the International Space Station.

In January 18, 2022, Rocket Lab USA, Inc. (Nasdaq: RKLB) announced it has closed the transaction to acquire SolAero. Rocket Lab is headquartered in Long Beach, California. As of June 2024, the company had approximately 2,000 full-time permanent employees globally.

Brief summaries of the relevant experience of the SolAero executive team are included below. Additional information about other key individuals with the company can be found on the company's website.

#### <u>Peter Beck</u>

#### Founder, President and Chief Executive Officer

Mr. Beck is the founder, President and Chief Executive Officer of Rocket Lab. Since founding the company in 2006, Mr. Beck has grown it into a global organization that develops and launches advanced rockets, satellites and spacecraft. Mr. Beck has served on Rocket Lab's board of directors, and as its President and Chief Executive Officer since July 2013 and was appointed Chairman of the Board in May 2021.

#### IRB 25-2: SolAero Technologies Corporation Project

#### <u>Adam Spice</u>

#### Chief Financial Officer

Mr. Spice has served as Rocket Lab's Chief Financial Officer since May 2018. From January 2011 until May 2018, he was Vice President and Chief Financial Officer at MaxLinear, Inc., a provider of radio frequency, analog and mixed-signal integrated circuits for the connected home, wired and wireless infrastructure, and industrial and multimarket applications.

#### <u>Frank Klein</u>

#### Chief Operations Officer

As Chief Operations Officer, Frank Klein leads Rocket Lab's efforts to scale manufacturing of its spacecraft, launch vehicles, and spacecraft components across multiple sites to meet growing customer demand.

Prior to joining the Rocket Lab team, Mr. Klein served Daimler AG (now Mercedes-Benz Group) for 27 years where he led various business divisions including Vehicle Research, Trucks, Cars, and Van manufacturing. While Vice President of Mercedes-Benz Vans Operations, Mr Klein managed global production across 12 production sites, heading up logistics, industrial engineering, and the division's quality department, with responsibility for more than 14,000 employees globally.

Based on the description and information given in the project plan, the company's historic growth & acquisitions, and current facilities, the company appears to have the track record to ensure a successful project.

Additional information is available on https://www.rocketlabusa.com/space-systems/solar/

#### 3. EQUITY:

SolAero anticipates an equity contribution of approximately \$32,183,875, CHIPS direct funding of approximately \$23,900,000, and investment tax credits of approximately \$19,316,125.

#### 4. MANAGEMENT:

SolAero currently has a management team for the site. Executive team biographies are found in Section 10 above.

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

#### 5. FISCAL IMPACT ANALYSIS

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

The fiscal impact shows that operations related to the \$72.6 million bond for SolAero CHIPS Project will generate an estimated total of almost \$11 million in taxes by 2043 and will continue to remain tax positive throughout the span of the contract. Moreover, as SolAero CHIPS Project continues to make positive contributions to the local economy and fosters partnerships with local entities, SolAero will continue to bring revenue to the City.

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

#### FINDINGS:

- 1. IRB 25-2 is a qualified project as defined by the State's Industrial Revenue Bond Act and the City enabling legislation (Resolution R-196, Sixth Council (126-1985) as amended by Resolution 350 Sixth Council; and
- 2. IRB 25-2 would make positive substantive contributions to the local economy and community by creating 70 high-wage economic base jobs; and
- 3. IRB 25-2 will improve Albuquerque's position in the forefront of advanced manufacturing and semiconductor manufacturing; and
- 4. IRB 25-2 would comply with the adopted City plans and policies, and meet community economic development priorities and objectives;
- 5. IRB 25-2 would adequately meet the evaluation criteria established by the City for Industrial Revenue Bond Act projects, including the requirement that the City recoup the value of its investment over the term of the bonds.

#### **STAFF RECOMMENDATION:**

Based on the above findings, staff recommends approval of IRB 25-2 as proposed in the project plan application.

Chris Chavez, Economic Development Manager Economic Development Department



### Fiscal Impact Analysis of Proposed SolAero CHIPS Project on the City of Albuquerque

Prepared for the City of Albuquerque Economic Development Department

Alexis P. Amodio-Cardwell

NOVEMBER 2024



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# Introduction

The Economic Development Department at the City of Albuquerque (the City) has requested that UNM's Bureau of Business & Economic Research (UNM BBER) conduct a fiscal impact analysis regarding an industrial revenue bond (IRB) application submitted by SolAero. The current project name is titled "SolAero CHIPS Project."

Presently, SolAero operates a facility in Albuquerque dedicated to producing space-grade solar cells, which play a critical role in the generation of power for Satellite Solar Panels. However, the company has identified a significant gap in capability; there is a 20-year technological divide between their existing wafer processing tools and the more advanced processing tools. To address this, SolAero aims to enhance their manufacturing capacity by expanding their MOCVD capabilities and adding five (5) MOCVD tools. This will help facilitate a substantial upgrade in their facility's operational efficiency and modernization by (1) keeping operations collocated in order to maximize technical, operational, and industrial efficiency and (2) mitigating costs and schedule risks by minimizing new construction and leveraging existing facility systems.

As a result of this project, SolAero anticipates the creation of 70 new jobs. These positions will encompass a diverse array of roles, including 14 design and engineering exempt professionals, 39 manufacturing non-exempt personnel, and 17 exempt and non-exempt personnel in quality assurance, logistics, and support roles.

In pursuit of this project, SolAero is requesting a \$72,600,000 bond from the City. In addition, SolAero is also seeking a 90% real and personal property tax exemption.

# Property

As mentioned in the introduction, SolAero already has an existing site in Albuquerque. However, given that SolAero would like to expand their wafer production facility, SolAero CHIPS Project will be held at the following locations:

- Location 1
  - o Address: 10420 Research Rd SE, Albuquerque, New Mexico 87123
  - UPC: 102105505041520166
  - Legal Description: LOT 2-A BLOCK 4 PLAT OF LOT 2-A IN BLOCK 4 SANDIARESEARCH PARK CONT 7.0406 AC
- Location 2:
  - o 1600 Eubank Blvd SE, Albuquerque, New Mexico, 87123
  - UPC: 102105504637420115L1
  - Legal Description: TR A PLAT FOR TRACTS A & B EMCORE DEVELOPEMENTCONT 8.9380 AC

Currently, Pontus St Albuquerque LLC owns the real estate located at 10420 Research Rd SE, and the New Mexico State Land Office owns the real estate located at 1600 Eubank Blvd SE.

# Data and Methods

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

Employment data includes the creation of 70 new jobs between 2025 and 2028. Total compensation for these jobs, which includes salaries and benefits, ranges from \$54,000 to \$194,805. SolAero also plans to offer an average salary increase of 3% and a benefits fringe rate of 35%.

It is estimated that approximately \$30 million of the project will be spent with local firms using local and state resources. This will include local architecture and construction firms, along with electrical and mechanical firms. Taxes for electricity and natural gas have also been considered in this analysis.

In terms of construction and equipment investments, SolAero is forecasting \$21,100,000 in construction costs and \$51,500,000 in equipment costs, for a total of \$72,600,000 (the requested amount of the IRB). The projected timeline for construction activities is set to span from 2025 to 2028.

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

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

- 1. All construction jobs are expected to be sourced from within the City.
- 2. SolAero projects that 80%-90% of the new positions will be filled locally. For the purposes of this analysis, we have chosen the median of 85%.
- 3. The fiscal impact assumes a 100% abatement of gross receipts and compensating taxes on purchases of eligible tangible personal property acquired in connection with SolAero CHIPS Project, as well as a 90% real and personal property tax abatement for the project site.
- 4. This analysis assumes that all employment resulting from this agreement including construction, research and development, and manufacturing activities will be a net gain to Albuquerque. Company spending is a net gain. The purchase of goods and services, real and personal properties, and construction expenditures are considered for gross receipt, compensating, and property taxes.
- 5. Only the City of Albuquerque incentives and the ensuing fiscal impact on the City are considered; incentives received from the State of New Mexico and/or any other governing entity are not included in this analysis.
- 6. Multipliers used for estimating the impacts of the project were based on historical budget information and the industry for which the impact was modeled. The original industry chosen for analysis was 336419: Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing. The following is the 2022 NAICS definition for NAICS 336419: "This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2)

developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment."<sup>1</sup> However, given that NAICS 336419 is not very prevalent in Albuquerque, no results would have been generated, as it does not exist in IMPLAN.<sup>2</sup> Thus, the multipliers used for estimating the impacts are based on 334511: Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing. The following is the 2022 NAICS Definition for NAICS 334511: "This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment."<sup>3</sup>

### Results

The fiscal impact presented in Table 1 shows that operations related to the \$72.6 million bond for SolAero CHIPS Project will generate an estimated total of almost \$11 million in taxes by 2043 and will continue to remain tax positive throughout the span of the contract. Moreover, as SolAero CHIPS Project continues to make positive contributions to the local economy and fosters partnerships with local entities, SolAero will continue to bring revenue to the City.

<sup>&</sup>lt;sup>1</sup> https://www.census.gov/naics/?input=336419&year=2022&details=336419

<sup>&</sup>lt;sup>2</sup> To estimate the fiscal impacts, BBER utilized IMPLAN v7.5. <u>IMPLAN</u> is an Input-Output (I-O) model used to gauge and estimate the direct, indirect, and induced impacts.

<sup>&</sup>lt;sup>3</sup> https://www.census.gov/naics/?input=334511&year=2022&details=334511



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

	Gross Receipts and Compensating Taxes						Property Tax					Foregone				Fiscal Impact			
	Company Employees	Indirect and Induced Employees	Company Purchases	Company Sales	Construction	Construction Employees	Utilities	Real (Company)	Personal (Company)	Real (Employees)	Other Taxes	Total Revenues	Real Property Tax	Personal Property Tax	GRT & CMP	City Costs	Annual	Present Value	Cumulative
2024	285	1,246	503,214	45,994	16,790	-	14,547	206,197	-	73	15	788,360	185,577	-	18,981	159	583,643	583,643	583,643
2025	2,979	8,364	515,794	73,869	467,440	88,480	14,547	260,180	-	726	149	1,432,528	234,162	-	473,397	1,589	723,380	697,705	1,281,348
2026	3,027	10,813	528,689	73,869	296,334	57,087	14,984	290,114	-	1,017	209	1,276,142	261,103	-	305,435	2,224	707,380	658,056	1,939,404
2027	6,915	17,743	656,784	75,263	48,395	9,125	15,433	285,279	-	2,106	433	1,117,476	256,751	-	48,824	4,607	807,294	724,347	2,663,751
2028	11,034	25,079	676,492	43,206	36,750	6,863	15,896	278,641	8,856	3,195	657	1,106,669	250,777	7,970	154,884	6,990	686,048	593,710	3,257,461
2029	18,202	37,645	693,405	44,286	1,368	-	16,373	271,948	16,668	5,083	1,045	1,106,024	244,754	15,001	122,456	11,121	712,692	594,877	3,852,338
2030	18,748	38,774	710,740	45,394	1,402	-	16,864	265,200	23,411	5,083	1,045	1,126,661	238,680	21,070	125,517	11,121	730,273	587,916	4,440,254
2031	19,062	39,937	728,508	46,528	1,437	-	17,370	258,396	29,056	5,083	1,045	1,146,423	232,556	26,151	128,655	11,121	747,940	580,767	5,021,021
2032	18,722	41,135	746,721	47,692	1,473	-	17,891	251,532	33,578	5,083	1,045	1,164,873	226,379	30,220	131,871	11,121	765,281	573,140	5,594,161
2033	18,352	42,369	765,389	48,884	1,510	-	18,428	244,609	36,948	5,083	1,045	1,182,618	220,148	33,253	135,168	11,121	782,927	565,544	6,159,705
2034	18,902	43,641	784,524	50,106	1,548	-	18,981	237,625	39,137	5,083	1,045	1,200,591	213,863	35,223	138,547	11,121	801,837	558,645	6,718,350
2035	19,469	44,950	804,137	51,359	1,587	-	19,550	230,578	40,115	5,083	1,045	1,217,873	207,520	36,104	142,011	11,121	821,117	551,772	7,270,123
2036	15,754	46,298	824,240	52,643	1,626	-	20,137	223,466	41,118	5,083	1,045	1,231,411	201,120	37,006	145,561	11,121	836,602	542,224	7,812,347
2037	16,227	47,687	844,846	53,959	1,667	-	20,741	216,289	42,146	5,083	1,045	1,249,689	194,660	37,932	149,200	11,121	856,776	535,590	8,347,937
2038	16,713	48,823	865,968	55,308	1,709	-	21,363	209,043	43,200	5,083	1,045	1,268,254	188,139	38,880	152,930	11,121	877,184	528,884	8,876,822
2039	17,215	49,992	887,617	56,690	1,751	-	22,004	201,729	44,280	5,083	1,045	1,287,406	181,556	39,852	156,754	11,121	898,124	522,289	9,399,111
2040	17,731	51,197	909,807	58,108	1,795	-	22,664	194,343	45,387	5,083	1,045	1,307,160	174,909	40,848	160,672	11,121	919,610	515,803	9,914,914
2041	17,399	52,438	932,552	59,560	1,840	-	23,344	186,884	46,521	5,083	1,045	1,326,668	168,196	41,869	164,689	11,121	940,792	508,954	10,423,868
2042	17,921	53,716	955,866	61,049	1,886	-	24,044	179,351	47,685	5,083	1,045	1,347,647	161,416	42,916	168,807	11,121	963,387	502,679	10,926,547
2043	18,459	55,033		62,576		-	24,765	171,741	48,877	5,083	1,045		154,567	43,989	173,027	11,121	(382,704)	(192,601)	10,733,947

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

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

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

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

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

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

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

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

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

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

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

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

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

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