



**U.S. Citizenship
and Immigration
Services**

**Non-Precedent Decision of the
Administrative Appeals Office**

MATTER OF R-T-I-

DATE: MAR. 27, 2017

APPEAL OF TEXAS SERVICE CENTER DECISION

PETITION: FORM I-140, IMMIGRANT PETITION FOR ALIEN WORKER

The Petitioner, a nonprofit research organization, seeks to classify the Beneficiary as a second preference member of the professions holding an advanced degree, and seeks a national interest waiver of the job offer requirement attached to this EB-2 classification. *See* Immigration and Nationality Act (the Act) section 203(b)(2), 8 U.S.C. § 1153(b)(2). After a petitioner has established eligibility for EB-2 classification, U.S. Citizenship and Immigration Services (USCIS) may, as matter of discretion, grant a national interest waiver if the petitioner demonstrates: (1) that the foreign national's proposed endeavor has both substantial merit and national importance; (2) that the foreign national is well positioned to advance the proposed endeavor; and (3) that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. *Matter of Dhanasar*, 26 I&N Dec. 884 (AAO 2016).

The Director of the Texas Service Center denied the Form I-140, Immigrant Petition for Alien Worker, finding that the Beneficiary qualified for classification as a member of the professions holding an advanced degree, but that the Petitioner had not established eligibility for a national interest waiver.

On appeal, the Petitioner contends that the Beneficiary is eligible for a national interest waiver based on his work developing new processes for non-petroleum based biofuel production and carbon capture. In January 2017, we issued a request for evidence (RFE) asking the Petitioner to provide evidence satisfying the three-part framework set forth in *Dhanasar*.

Upon *de novo* review, we will sustain the appeal.

I. LAW

To establish eligibility for a national interest waiver, a petitioner must first demonstrate qualification for the underlying EB-2 visa classification, as either an advanced degree professional or an individual of exceptional ability in the sciences, arts, or business. Because this classification requires that the individual's services be sought by a U.S. employer, a separate showing is required to establish that a waiver of the job offer requirement is in the national interest.

Section 203(b) of the Act sets out this sequential framework:

- (2) Aliens who are members of the professions holding advanced degrees or aliens of exceptional ability. –
 - (A) In general. – Visas shall be made available . . . to qualified immigrants who are members of the professions holding advanced degrees or their equivalent or who because of their exceptional ability in the sciences, arts, or business, will substantially benefit prospectively the national economy, cultural or educational interests, or welfare of the United States, and whose services in the sciences, arts, professions, or business are sought by an employer in the United States.
 - (B) Waiver of job offer –
 - (i) National interest waiver: . . . [T]he Attorney General may, when the Attorney General deems it to be in the national interest, waive the requirements of subparagraph (A) that an alien’s services in the sciences, arts, professions, or business be sought by an employer in the United States.

While neither the statute nor the pertinent regulations define the term “national interest,” we recently set forth a new framework for adjudicating national interest waiver petitions. *See Dhanasar*, 26 I&N Dec. 884.¹ *Dhanasar* clarifies that, after EB-2 eligibility as an advanced degree professional or individual of exceptional ability has been established, USCIS may grant a national interest waiver if the petitioner demonstrates by a preponderance of the evidence: (1) that the foreign national’s proposed endeavor has both substantial merit and national importance; (2) that the foreign national is well positioned to advance the proposed endeavor; and (3) that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. If these three elements are satisfied, USCIS may approve the national interest waiver as a matter of discretion.

The first prong, substantial merit and national importance, focuses on the specific endeavor that the foreign national proposes to undertake. The endeavor’s merit may be demonstrated in a range of areas such as business, entrepreneurialism, science, technology, culture, health, or education. In determining whether the proposed endeavor has national importance, we consider its potential prospective impact.

The second prong shifts the focus from the proposed endeavor to the foreign national. To determine whether he or she is well positioned to advance the proposed endeavor, we consider factors

¹ In announcing this new framework, we vacated our prior precedent decision in *Matter of New York State Department of Transportation*, 22 I&N Dec. 215 (Act. Assoc. Comm’r 1998) (*NYSDOT*).

including, but not limited to: the individual's education, skills, knowledge and record of success in related or similar efforts; a model or plan for future activities; any progress towards achieving the proposed endeavor; and the interest of potential customers, users, investors, or other relevant entities or individuals.

The third prong requires the petitioner to demonstrate that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. In performing this analysis, USCIS may evaluate factors such as: whether, in light of the nature of the foreign national's qualifications or the proposed endeavor, it would be impractical either for the foreign national to secure a job offer or for the petitioner to obtain a labor certification; whether, even assuming that other qualified U.S. workers are available, the United States would still benefit from the foreign national's contributions; and whether the national interest in the foreign national's contributions is sufficiently urgent to warrant forgoing the labor certification process. In each case, the factor(s) considered must, taken together, indicate that on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification.²

II. ANALYSIS

The Beneficiary received a Ph.D. in chemical engineering from the [REDACTED]. He intends to continue his work as a lead research chemical engineer and project manager with the [REDACTED] of the Petitioner, [REDACTED] a non-profit research organization. The Director found that the Beneficiary qualified as a member of the professions holding an advanced degree, but that the record did not establish his eligibility for a national interest waiver. On appeal and in response to our RFE, the Petitioner contends that the Beneficiary is eligible for a waiver because he is "exceptionally well qualified and positioned to effect [the Petitioner's] programs to develop and implement new technologies in the fields of bio-energy production and carbon capture."

A. Substantial Merit and National Importance of the Proposed Endeavor

The Petitioner has indicated that the Beneficiary conducts research into developing "clean energy alternative energy technologies and sources." It states that the Beneficiary's work aims to develop clean energy solutions that "improve the economic health of the United States on a national level through cost savings to power producers, allowing for environmentally responsible use of the U.S.'s abundant coal resources and existing fossil-fuel based infrastructure, and by dramatically reducing emissions of harmful greenhouse gases." The Petitioner provided letters from colleagues and professors, including representatives of the [REDACTED] discussing the importance of the Beneficiary's proposed work developing cleaner, more efficient energy sources to meet growing demands in a "carbon-constrained world." We find that this proposed research has substantial merit because it aims to advance scientific knowledge and further economic and environmental interests.

² See *Dhanasar*, at 889-91 for further elaboration on these three prongs.

The record also demonstrates that the Beneficiary's proposed work, continuing to research and develop new technologies in the fields of bio-energy production and carbon capture, is of national importance. The Petitioner provides information published by the [REDACTED] explaining that one of the ways to "substantially enhance the energy security of the United States" is by "developing technologies that have the potential of converting domestic biomass resources into transportation fuels (biofuels)." The [REDACTED] reports confirm that this production has the potential to replace billions of barrels of oil and tons of coal in an effort to reduce nearly 700 million tons of carbon dioxide from the air. Several letters also speak to the national security interest in the United States becoming energy independent. For example, [REDACTED] Assistant Program Director for the [REDACTED] notes that the Beneficiary's proposed endeavor "has the potential of significantly reducing the cost of domestic biofuels, enabling a cost-competitive alternative to petroleum-based fuels" and "will help reduce and stabilize gas prices for consumers." The national importance of the Beneficiary's biofuels research is further supported by the fact that several of [REDACTED] biofuels projects, in which the Beneficiary has served as lead research engineer, have received funding from the [REDACTED].³

B. Well Positioned to Advance the Proposed Endeavor

The second prong shifts the focus from the proposed endeavor to the Beneficiary's qualifications. The record includes a copy of the Beneficiary's résumé and educational credentials, documentation of his published and presented work, evidence of his peer review activities, and reference letters discussing his work in the field. As discussed below, we find that the Beneficiary's notable experience leading high-profile projects in the area of clean energy that have received consistent funding from federal agencies, renders him well positioned to advance his proposed endeavor.

The record includes letters from the Beneficiary's colleagues and independent professionals attesting to the importance of his accomplishments. The Petitioner explained that one of the Beneficiary's important contributions to the field of clean energy and biofuels was his leadership in refining [REDACTED] senior vice president, [REDACTED] explained that this technology is used to remove contaminants such as sulphur and heavy metals from [REDACTED] generated during coal gasification. He explains that the Petitioner was recently selected by [REDACTED] to conduct a precommercial demonstration of the [REDACTED] process technology coupled with carbon capture at [REDACTED] in [REDACTED] Florida. [REDACTED] states that this project received more than \$180 million dollars in [REDACTED] funding and that, due to his vast expertise in refining the [REDACTED] the Beneficiary served as the lead research engineer on this project. He was critical to the "operation, optimization, and technical validation of [REDACTED]

³ These projects include a \$6 million cooperative project with [REDACTED] to develop an integrated forward osmosis and membrane distillation technology; a \$7 million project to modify the scale-up of [REDACTED] and carbon dioxide capture technologies; and a \$168 million initiative to mitigate the technical risks associated with the scale-up of [REDACTED] and carbon dioxide capture technologies. The latter project was funded through the 2009 American Recovery and Reinvestment Act as a flagship national technology project to demonstrate contaminant removal and carbon capture and sequestration towards a vision of developing a zero-emission coal plant.

technology.” [REDACTED] confirms that the Beneficiary’s contributions enabled [REDACTED] operational reliability factor to improve from 50% to over 85%. The record also includes documentation that the Beneficiary is “leading the development of a multi-physics based reactor model” that is being validated using “hydrodynamic data he is generating using a unique cold flow unit he has installed and is operating” at the [REDACTED] facility. [REDACTED] affirms that this model is poised to further aid validation of the performance data collected at [REDACTED]

The record also includes documentation that the Beneficiary has played a critical role in conceptualizing and producing a fluidized bed reactor process for catalytic biomass pyrolysis, leading to a patent and a grant from [REDACTED]. Catalytic biomass pyrolysis is a process for converting biomass (the energy from plants and plant-derived materials) into fungible fuels such as ethanol. As explained by [REDACTED] president of [REDACTED] a management and technical consultancy, the Beneficiary expanded on his initial process concept to “lead the design, fabrication, installation, commissioning, and testing of a unique biomass pyrolysis pilot-unit capable of processing one ton of biomass per day.” [REDACTED] confirms that the Beneficiary’s pilot unit is operational and poised to lead to “an economically viable process for production of biofuels.”

Similarly, [REDACTED] a professor at [REDACTED] attests that the Beneficiary was able to successfully develop a catalyst formulation that was effective in reforming heavy fuels, primarily jet fuel, and produce hydrogen to power fuel cells to generate electricity. [REDACTED] explains that the Beneficiary “was able to successfully transform the project by developing a sulfur-tolerant, deactivation-resistant, catalyst that was utilized in a bench-scale unit to reform actual jet fuel to produce electricity using a solid oxide fuel cell.” [REDACTED] founder and president of [REDACTED] described how this technology was utilized by his company to develop a catalyst formulation that was effective in reforming heavy fuel surrogates, and that his company used the Beneficiary’s prototype to patent its flexible fuel reformer to produce hydrogen using jet fuel in a bench scale unit. [REDACTED] notes that the Beneficiary’s work is “critical” to “strengthening the United States’ energy economy, while keeping the environment clean.”

The Petitioner has also submitted evidence that the Beneficiary’s work has led to commercial contracts between [REDACTED] and its partners. [REDACTED] vice president of engineering at [REDACTED] states that the Beneficiary, through [REDACTED] is the manager of a commercial demonstration of [REDACTED] gasification technology in partnership with the [REDACTED]. [REDACTED] explains that the Beneficiary’s “expertise in [REDACTED] and conditioning, CO2 removal, [REDACTED] utilization, and overall process engineering and integration have been highly valuable for both its technical feasibility and cost to [REDACTED]. He states that the Beneficiary and his team have “proposed and implemented commercially-relevant and cost-effective process solutions” and that they hope to “license” and “rapidly deploy” this technology through their “waste-to-fuels gasification technology platform to numerous United States federal and local government entities, as well as to a number of private project developers in North America and around the world.”

In support of his appeal, the Beneficiary submits additional letters along with a chart of [REDACTED] projects in which he has played a leading role and the amount of [REDACTED] funding for each project. He also

submits copies of funding grants from the [REDACTED] press releases confirming collaboration agreements between [REDACTED] and commercial partners to continue developing the Beneficiary's work, and invitations to conduct peer-review and professional speaking engagements.

The significance of the Beneficiary's past work is corroborated by evidence that it has found practical application in industry settings. In addition, as described above, the record reflects sustained government and industry interest in his past and ongoing research. We find this documentation sufficient to demonstrate that the Beneficiary is well positioned to advance the proposed endeavor.

C. Balancing Factors to Determine Waiver's Benefit to the United States.

Third and finally, we conclude that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. The labor certification process is designed to certify that the foreign worker will not displace nor adversely affect the wages and working conditions of U.S. workers who are similarly employed. Job requirements must adhere to what is customarily required for the occupation in the United States and may not be tailored to the foreign worker's qualifications or unduly restrictive, unless adequately documented as arising from business necessity.

As noted above, the Beneficiary holds a Ph.D. in chemical engineering, along with considerable experience and expertise in his field. He has established a proven record of innovation and leadership developing and improving cutting-edge clean energy technology processes, and the Petitioner has documented his past success advancing high-profile projects such as spearheading multi-million dollar projects that develop unique and innovative clean energy solutions. His experience developing and improving clean energy and biofuels processes, his record of proven innovation, and his ability to use creative thinking to solve technical and multifaceted problems in the energy sector could not be easily articulated on an application for labor certification because such requirements are not customarily required for the occupation of a chemical engineer.

Furthermore, numerous experts in the field testified to their use of the Beneficiary's work to advance their proprietary clean energy technologies, extending the benefits of his work beyond any one employer. Because of his demonstrated history of managing large-scale engineering projects and developing state of the art clean energy initiatives, we find the Beneficiary offers contributions of such value that the United States will benefit from his work even assuming that other qualified U.S. workers were available.

III. CONCLUSION

The Beneficiary has met the requisite three prongs set forth in the *Dhanasar* analytical framework. We find that he has established eligibility for and otherwise merits a national interest waiver as a matter of discretion.

Matter of R-T-I-

ORDER: The appeal is sustained.

Cite as *Matter of R-T-I-* ID# 77341 (AAO Mar. 27, 2017)