



Testimony of

**Lee Colby**

On behalf of

The Institute of Electrical & Electronics  
Engineers - United States of America (IEEE-USA)

At a 12 June 2008 hearing of the

Subcommittee on Immigration, Citizenship, Refugees, Border Security  
and International Law, Committee on the Judiciary,  
United States House of Representatives

on

**The Need for Green Cards for Highly Skilled Workers**

Thank you for inviting me to speak today. My name is Lee Colby and I am testifying today as a member of the Institute of Electrical and Electronics Engineers - United States of America (IEEE-USA). The Institute of Electrical and Electronics Engineers (IEEE) is a multi-national professional/technical society made up of more than 375,000 individual electrical, electronics, computer and software engineers in 150 countries. IEEE-USA promotes the professional careers and technology policy interests of IEEE's 215,000 U.S. members, 22% of whom were born in other countries.

I have been a professional electrical engineer in Silicon Valley for almost fifty years. In fact, I was in Silicon Valley when it was still known as the Valley of Hearts Delight. For the first 36 years of my career I worked as an electrical engineer for Hewlett-Packard. I left HP in 1997 and started Lee Colby and Associates which consults on circuit designs for some of the world's leading technology firms. In 2000 I decided to try my hand in a technology start-up, O'LE Communications.

IEEE-USA

1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104 USA

Office: +1 202 785 0017 ■ Fax: +1 202 785 0835 ■ E-mail: [ieeusa@ieee.org](mailto:ieeusa@ieee.org) ■ Web: [www.ieeeusa.org](http://www.ieeeusa.org)

It was at O'LE that I had my most direct experience with our immigration system. We employed about 24 employees, half in Taiwan and half in the U.S. During the dot.com boom, we had trouble finding American workers, so we turned to the H-1B program. When the dot.com boom burst, those workers were unable to transfer to another company and so had to leave. This is not uncommon. H-1B workers are, effectively, tied to their employer, creating a dependency that is both unjust and harmful. It would have been better if we could have hired all of our workers as permanent residents, but that is simply not a practical option, especially for small firms.

In 2005, I served as Chair of IEEE's Santa Clara Valley Section, representing over 13,000 electrical, electronics and computer engineers in the San Jose area. I also volunteer as a math and science teacher's assistant at the Sunnyvale Middle School and teach a class on fuel and solar cells for advanced high school students at San Jose State during the summer.

In other words, I know the technology sector inside and out. For almost 50 years I have been deeply involved with cutting edge technology and the men and women who developed it. I understand the problems faced by engineers and employers. And I believe the approach to high-skill immigration reform being offered by Chairwoman Lofgren is a good one for all of the parties involved.

### **Importance of Education, Infrastructure and Immigration for US Economic and Technological Competitiveness**

Continuing US economic and technological leadership in the 21<sup>st</sup> Century will depend in no small part on the nation's ability to marshal the resources and the will to:

- 1) increase high quality educational opportunities for US students at all levels, especially in critical disciplines like math and science;
- 2) improve America's high tech infrastructure, including its basic and applied research and development capabilities; and
- 3) enact immigration reforms that will give priority to the legal permanent admission of persons with the knowledge, skills and talents needed to sustain America's unparalleled tradition of invention, innovation and entrepreneurship.

Balanced reforms in the nation's legal permanent and temporary admissions programs are particularly important if U.S. employers and U.S. workers are to compete and succeed in an increasingly knowledge-based, technology-driven global economy. Instead of becoming more dependent on temporary non-immigrant visa programs, like the H-1B, IEEE-USA recommends that Congress make permanent immigrant admissions programs the preferred option for adding skilled and educated workers to our economy.

To this end, IEEE-USA urges Congress to put aside longstanding partisan differences and take immediate steps to:

1. Increase the availability of permanent, employment-based (EB) visas and streamline the immigrant admissions (Green Card) process in order to make these visas the preferred

path to legal permanent resident status and full citizenship for foreign professionals in STEM fields,

2. Allow foreign students who earn advanced degrees in STEM fields from U.S. colleges and universities to transition directly from temporary student visas to legal permanent resident (Green Card) status,
3. Reform the H-1B temporary work visa program to ensure that U.S. and foreign workers are treated fairly by requiring all participating employers to make good faith efforts to recruit U.S. workers, to use the H-1B program to augment, not replace American workers and to pay H-1B workers fair, market-based wages, and
4. Expedite visa processing for trusted short-term visitors, including foreign professionals who come periodically to attend conferences and meetings, to teach, or to conduct research in the United States.

### **Two Lofgren Bills Address Permanent Employment-based Admissions**

Earlier this year, House Immigration Subcommittee Chair Zoe Lofgren and a bipartisan team of like-minded legislators introduced three important permanent immigrant admissions reform proposals. Two of these bills make simple, easy to implement reforms that will reduce the waiting times that talented people – and their prospective employers – must currently endure before they can be admitted permanently to live and work in the United States.

- HR 5882 will help to reduce the backlog for highly skilled admissions by recapturing an estimated 220,000 employment-based Green Cards that were not issued between 1992 and 2007 due to bureaucratic inefficiencies.
- HR 5921 will further reduce administrative backlogs and waiting times by eliminating per country limits on employment-based admissions from high demand countries like India, the Philippines and Mexico. If the U.S. needs to add skilled workers to our economy, and I think we do, why do we care which countries they come from?

I believe there are at least two additional reforms that Congress should consider to further increase the availability of immigrant visas for foreign-born high tech professionals.

One would be to raise the statutory admissions ceiling on permanent employment-based visas. The current 140,000 annual limit is unduly restrictive and should be expanded.

Another would be to exclude spouses and minor children from the annual cap. Such a step would free up as many as 60,000 additional employment-based visas per year for the exclusive use of principals, including high tech professionals.

### **Third Lofgren Bill Addresses High Tech Talent Retention Problems**

Representative Lofgren's third proposal, – and an identical bill, S.3084, recently introduced by Senators Barbara Boxer (D-CA) and Judd Gregg (R-NH) – addresses a growing high tech talent retention problem that adversely affects many U.S. businesses, educational institutions and government agencies.

HR 6039 will exempt foreign nationals with advanced degrees in STEM fields from U.S. educational institutions from the limits on permanent employment-based admissions. If enacted, this reform will enable foreign students with U.S. graduate degrees in technology-based disciplines to get Green Cards upon completion of their studies rather than having to return to their home countries or remain here for as long as a decade on a temporary (non-immigrant) visa until a Green Card becomes available.

Graduates from American schools are among the most sought after employees in the world. This is especially true of students who receive Masters and PhD degrees in STEM fields. America has already invested in these students' education. The students speak English, have lived here for several years and, to qualify for an employment-based visa, have a job. It is in America's interest and Americans' interest that we allow them to put their talents and education to work here.

Remember, it is not a question of whether the talented graduates of our schools will get jobs, only of where these jobs will be located. If we force them to leave, the jobs they create will not be in this country, but rather in whatever nation had the foresight to accept them.

IEEE-USA and the Semiconductor Industry Association (SIA) – two groups that have long been on opposite sides of the table on temporary work visa issues – have joined forces to promote prompt enactment of all three Lofgren proposals. Our two organizations are very encouraged by the possibility that Chairwoman Lofgren's reform bills will help to shift the focus of the debate about high tech immigration away from the controversial H-1B program to immigration reform proposals on which America's business organizations, educational institutions, labor unions and professional societies are more likely to agree.

### **Why Immigration is Better than Temporary Visas**

My beliefs on this subject have been informed by my 50 years as an electrical engineer and my deep involvement with the engineering community. During my service as Chair of IEEE's Solid State Circuits Society Chapter in San Jose, 15% of our members, all highly trained engineers, were without jobs. I have had friends replaced by H-1B visa holders and had friends have their jobs moved overseas. I have seen companies, including my own, lose business opportunities because they could not find the right skilled people. I have also lost some of my best employees and friends when their H-1B visas expired, forcing them to leave the country.

Today, my neighborhood is filled with workers on H-1B visas. While walking my miniature schnauzer in the evening, they tell me what they will do once they become American citizens. They plan to start their own companies, create wondrous (and profitable) new products, entirely new industries in some cases. What I would like to know is: Why are we making them wait, and making our country wait, before letting them fully contribute to our society? How is this in our country's interest?

The United States needs more skilled engineers and scientists. We need to educate more of our own students in these fields, but the United States does not have a monopoly on talent. There are hard working, innovative and smart people all over this planet, many of whom would apply their skills here, if given a chance. Congress needs to give them that chance.

But how that opportunity is offered counts more than the offer itself. Temporary visas, like the H-1B, do little to enhance America's long-term competitiveness. They are a short-term fix that will weaken us in the long-run.

The H-1B visa is a great way to train our overseas competition, but it is an awful way to build our workforce. Innovative companies do not need innovative people for six years – they need them for thirty. Moreover, the subservient position H-1B visa place workers in makes them easy to exploit, harming both American and foreign engineers.

America does not need skilled temporary workers. We need skilled Americans. And American citizenship requires an EB visa.

## **Conclusion**

IEEE-USA is convinced that welcoming foreign nationals with the knowledge, skills and determination needed to succeed and making them citizens has always served America's best interests. Accordingly, we urge Congress to make needed reforms in the nation's permanent, employment-based admissions system rather than simply raising the H-1B visa cap. We firmly believe that an immigration policy based on the concept of "Green Cards, Not Guest-workers" will do far more to help America create jobs, maintain its technological competitiveness, and ensure its economic and military security than continuing to rely on temporary admissions programs.

The goal of U.S. immigration policy should be to facilitate the entry of talented people - including potential inventors, innovators and entrepreneurs from other countries. Congress should grant them legal permanent resident status and put them on a path to full-fledged American citizenship.

Congress should pass the Lofgren EB reform bills.