



Testimony of

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To The

Committee on the Judiciary
United States Senate

Examining the Implications of
the H-1 Visa for the American Economy

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My name is John Steadman and I am testifying today in my role as the President-Elect of the Institute of Electrical and Electronics Engineers – United States of America (IEEE-USA). Until recently, I headed the Department of Electrical Engineering at the University of Wyoming in Laramie. Last month I became the Dean of Engineering at the University of South Alabama in Mobile.

The Institute of Electrical and Electronics Engineers is a transnational professional society made up of more than 382,000 individual electrical, electronics, computer and software engineers in 150 countries around the world. IEEE-USA was established in 1973 – in the midst of another economic downturn – to promote the professional careers and technology policy interests of IEEE's 235,000 U.S. members, approximately 2% of whom are H-1B visa holders.

Nearly 70% of IEEE-USA's members work for private businesses, primarily in the aerospace and defense, biomedical technology, computers and communications, electrical and electronics equipment manufacturing and electric power industries. Ten percent (10%) are employed by Federal, state and local government agencies. Another 10% teach

at American colleges and universities or work for non-profit research organizations. Most of the rest are self-employed and/or work as consultants to business and government.

Employment-Based Admissions Programs

Responding to speculative predictions that America faced critical shortages of engineers, scientists and other highly skilled professionals, Congress made several important changes to the nation's employment-based immigration laws beginning in 1990.

The Immigration Act of 1990 revised permanent employment-based visa programs and authorized increases in the admission of foreign nationals seeking legal permanent resident status in the United States. It modified temporary work visa programs and created new ones for foreign professionals and other skilled workers. And it expedited admissions processing for foreign visitors coming temporarily to conduct business or to study in the United States.

Proponents argued that these changes were needed to enable businesses and educational institutions to compete for people with specialized knowledge and skills deemed to be in short supply in the United States. Opponents insisted that there was no compelling empirical evidence of shortages that could not be met by improving education and training opportunities for U.S. workers. Others raised concerns about the potentially adverse effects of substantial increases in the supply of temporary foreign workers on employment opportunities and compensation for U. S. citizens and legal permanent residents, especially during periods of flat or declining economic growth.

Among the most important of the new temporary admissions programs - as a source of skilled professionals for U.S. employers and transitional visas for foreign students who intend to apply for legal permanent resident status - is the H-1B visa program.

Key Features of the H-1B Visa Program

To qualify for an H-1B visa, a foreign national must have at least a baccalaureate degree (or equivalent experience) in an occupation requiring the theoretical and practical application of specialized knowledge and skills and a job offer from a U.S. employer.

Employers who plan to hire H-1B workers must file labor condition applications (LCAs) at the U.S. Department of Labor and agree to pay H-1B workers prevailing wages in their intended areas of employment.

H-1B dependent employers (where more than 15% of all employees are H-1B workers) must also attest that they have tried and been unable to recruit U.S. workers and have not displaced and will not displace U.S. workers in order to hire H-1B workers.

These labor condition application requirements are intended to ensure that the admission of foreign professionals on H-1B visas will not adversely affect job opportunities, wages and working conditions for similarly qualified U.S. workers.

As soon as the Department of Labor approves their Labor Condition Application, all petitioning employers must submit an H-1B visa application to the Bureau of Citizenship and Immigration Services (formerly the Immigration and Naturalization Service) in the Department of Homeland Security along with an application-processing fee of \$130.

Private sector employers must pay an additional \$1,000 fee to help fund technical skills training programs for U.S. workers administered by the Department of Labor, a special educational grants and scholarships program administered by the National Science Foundation and improvements in H-1B program administration and enforcement.

H-1B Visa Ceilings and Admissions Trends

In 1998 and again in 2000, Congress substantially increased the numbers of foreign professionals legally authorized to enter the United States on H-1B visas - from 65,000 a year to 115,000 a year for 2 years beginning in 1999; and to 195,000 a year for 3 years beginning in 2001.

The current 195,000 H-1B visa ceiling will fall back to 65,000 at the end of this month. And, unless they are extended by Congress, the recruitment and retention requirements for H-1B dependent employers and provisions authorizing the use of application fees to fund education and training programs for U.S. workers will expire at the same time.

Immigration and Naturalization Service data indicate that demand for H-1B workers grew slowly during the early 1990's - from 52,000 visas issued in FY 1992 to 60,000 in FY 1996 - and then spiked sharply upward, from 91,000 in FY 1998 to nearly 137,000 in FY 2000.

Since then INS has reported approving more than 200,000 initial H-1B petitions in FY 2001; 103,584 in FY 2002; and 141,520 in the first three quarters of FY 2003. 56,986 of this year's approvals to date count against the current 195,000 cap. The other 84,534 petitions that have been approved so far this year are for persons who are exempt from the Congressionally mandated cap. Exempt workers include those employed by colleges and universities as well as those who work for nonprofit and governmental research organizations. An additional 47,813 petitions are currently pending adjudication, one third of which will count against the cap if they are approved.

If this year's 95% approval rate continues in the 4th quarter, as many as 238,995 could be approved in FY 2003, more than twice as many as were approved last year.

According to INS data, more than two-thirds of the new H-1B visa petitions approved in recent years have been for information technology workers and engineers, including electrical, electronics, computer and software engineers. Most of the rest have been for managers and administrators of various kinds and college and university educators.

The most common country of birth for new H-1B workers is India (with nearly 50%), followed by China, Canada, the United Kingdom, the Philippines and Korea (with 20%).

Nearly 60% have Bachelors degrees; 30% have Masters degrees; and 8% have PhDs or other professional degrees.

The median annual compensation for all new H-1B workers with Bachelors degrees in recent years has been \$50,000. New H-1B workers with Masters degrees in computer-related and engineering occupations earn \$60,000 a year. Those with PhDs earn between \$70,000 and \$75,000 a year.

Nearly 60% of all new H-1B workers in recent years came from overseas. 40% had been previously admitted on other temporary visas. 24% held student visas.

1) The H-1B Visa Is Exacerbating the Problem of Engineering Unemployment

IEEE-USA is extremely concerned that current levels of engineering unemployment – precipitated by the collapse of the Dot-Com and telecommunications sectors – are being exacerbated by the continuing reliance of many employers on foreign-born professionals admitted under the H-1B and other “temporary” work permit programs and by the global outsourcing of engineering and other high paying manufacturing and service sector jobs.

Between FY 2000 and FY 2002, the INS approved almost 800,000 H-1B visa petitions (540,000 new petitions and 250,000 renewal petitions).

During the same 3 year period, unemployment among electrical and electronics engineers in the United States spiked sharply upward from 1.3% in 2000 to 4.2% in 2002. The unemployment rate for computer scientists rose from 2.0% in 2000 to 5.0% last year.

And the unemployment situation has become even worse in 2003. According to the Bureau of Labor Statistics, the unemployment rate for electrical and electronic engineers reached an all time high of 7.0% in the first quarter of this year. 6.5% of U.S. computer hardware engineers and 7.5% of all computer hardware engineers were out of work. These were *unprecedented* levels for each occupation.

The impact of H-1Bs on the labor market is also compounded by a significant loss of jobs in the high-tech sector. According to recent statistics from the American Electronics Association, America’s electronics industry shed 560,000 high paying manufacturing and service jobs between January 1, 2001 and December 31, 2002. Given contemporaneous increases in the outsourcing of high-end, manufacturing and service sector jobs to lower-cost overseas locations, many of these “high wage/high value added jobs” may be gone for good.

2) H-1B Worker Safeguards are Weak and Ineffective

The H-1B Labor Condition Application requirements were originally intended to help balance U.S. employers’ needs for temporary access to specialized skills not readily available in the United States with U.S. workers needs for safeguards against unfair competition for jobs in domestic labor markets.

Employers who intend to hire foreign nationals on H-1B visas are required to attest that: 1) they will pay their H-1B workers the higher of the actual or prevailing wage in their intended area of employment; 2) working conditions for U.S. workers will not be adversely affected; 3) there are no strikes or lockouts at locations where H-1B workers will be employed; and 4) that a notice of their intent to hire foreign workers on H-1B visas will be posted at their intended place(s) of employment.

So-called “H-1B dependent” employers (where 15% or more of all employees are H-1B workers) must also attest that: 5) they have tried and been unable to recruit U.S. workers; and 6) they have not displaced and will not displace U.S. workers in order to hire H-1B workers. Employers of H-1Bs who are paid at least \$60,000 per year or who have at least a Master’s degree or the equivalent in a specialty related to needs of such employers are not subject to these recruitment and retention requirements.

Currently H-1B dependent firms account for only about 2% of the companies that submit H-1B applications (source). The remaining 98% of employers that petition for H-1B workers are not required to try to recruit and retain U.S. workers before hiring H-1Bs.

3) H-1B Investigative Powers and Enforcement Authority Are Also Limited

Largely because the Departments of Labor and Homeland Security have very limited investigative and enforcement authority, the attestation requirements that were enacted to protect job opportunities, wages and working conditions for U.S. workers and help to prevent H-1B workers from being exploited have proven to be weak and ineffective.

Most notably, the prevailing wage attestation requirement is riddled with loopholes. Rather than having to pay current prevailing wages identified using standardized procedures, employers are free to use a wide variety of acceptable sources to establish the validity of the wages they intend to pay. Sometimes wage rates are based on surveys that are two or three years old. In addition, proposed salaries meet the prevailing wage requirement if they are no more than 5% lower than the actual or prevailing wage being paid to similarly qualified U.S. workers in applicable areas of employment.

Several studies have found that many H-1B workers are paid substantially less than similarly skilled U.S. workers (Sources). Others, most notably a 2001 National Research Council report and a 2003 Federal Reserve Bank of Atlanta study, have concluded that the magnitude of any effect that the H-1B program has on wages is difficult to estimate. (Sources) Significantly, the NRC report notes that the H-1B effect may not be to depress wages but rather to keep wages from rising as rapidly as they would if there were no H-1B program.

Because they have very limited authority to initiate investigations or enforcement actions before receiving a complaint, the hands of the Departments of Labor and Homeland Security are effectively tied when it comes to taking prompt and decisive action against employers who abuse the program. Displaced Americans are likely to be long gone before their foreign replacements show up for work. And H-1B workers, who are

virtually indentured to sponsoring employers for periods of six years or longer, are often reluctant to complain to the government if their employers fail to live up to their labor condition attestations.

4) Fee-Based Skills Training Programs are Missing their Intended Targets

A key selling point that helped to persuade skeptical lawmakers to approve an expansion of the H-1B program in 1998, was the imposition of a \$500 fee (raised to \$1,000 in 2000) on petitioning employers to fund technical skills training programs for U.S. workers; grants and scholarships to enable low income students to study math, engineering and computer science at American colleges and universities; math and science educational improvement projects in grades K-12; and improved H-1B program administration and enforcement by responsible Federal agencies.

According to a recent report from the U.S. Department of Commerce (Education & Training for the Information Technology Workforce, June 2003), very few of the training providers who have received H-1 technical skills training grants from the Department of Labor are preparing U.S. workers for the kinds of professional-level jobs for which U.S. employers typically recruit foreign nationals on H-1B visas. This is due, in part, to ambiguity about the types and levels of training that should be provided and the traditional emphasis of most local Workforce Investment Boards on the provision of entry-level training for unemployed and disadvantaged workers. Similar concerns are noted in a 2002 General Accounting Office report (GAO-02-881).

5) Statistical Deficiencies Continue to Hamper Policy-Makers

The continuing lack of current statistical information seriously limits the ability of policy-makers in Congress and responsible agencies to effectively oversee and manage the workings of the H-1B program.

Numerical and demographic information about H-1B workers and their employers as well as statistics on the results of investigative and enforcement actions must be collected and disseminated much more quickly than they have been in the past. To be optimally useful to decision makers, they should provide more accurate estimates of the size of the H-1B population, not just (as they do now) on variations in the levels of work performed by various agencies (eg., labor condition applications processed by the Department of Labor; visa petitions received and approved by the Department of Homeland Security; and visas issued in the United States by the Departments of Homeland Security and at overseas locations by the Department of State).

6) The Impact of the H-1B is Compounded By Abuses of the L-1 Visa

In addressing the impact of the H-1B, Congress must also consider the implications of the L-1 Visa. The L-1 (Intra-Company Transfer) visa was established by Congress in the 1950's to enable multi-national companies to periodically relocate foreign executives, managers and workers with specialized knowledge of their employer's products and

services to branches and subsidiaries in the United States. It is currently being used by non-U.S. engineering services firms to import significant number of technical workers, IT professionals and engineers through their U.S. subsidiaries, who are outsourced to other U.S. companies and subsidiaries, who in turn, lay off their U.S. workers. In many instances, the displaced U.S. workers are being forced to train their non-U.S. replacements in order to obtain a severance. The L-1 Visa has been exploited in this fashion due to its lack of even minimal workforce protections and because it allows some employers to avoid, at least for a time, the public scrutiny and negative publicity associated with the H-1B visa program.

We don't believe that Congress intended – or could have even anticipated – that the L-1 visa program would be used by some companies to import substantial numbers of technical workers, IT professionals and engineers and then use those employees to provide services under contract or lease arrangements with other U.S. based employers who, in turn, lay off many of their U.S. workers. The practice of requiring displaced U.S. workers to train their replacements in order to qualify for severance benefits is an outrageous abuse and is clearly at odds with the purposes for which the L-1 visa program was originally established.

7) Increasing Reliance on Guest-Workers Also Fuels Outsourcing

Another assertion that is often made by the proponents of high tech guest worker programs is that they will be forced to send even more jobs overseas if their ability to import foreign nationals in sufficient numbers without being burdened by any worker safeguards or user fees is limited or otherwise compromised. IEEE-USA believes that this threat rings hollow, because it greatly oversimplifies the economic forces that are driving globalization.

Even though U.S. employers continue to enjoy easy access to guest-workers through the H-1B, L-1 and other work visa programs, the outsourcing of engineering design as well as research and development functions to lower cost overseas locations has been increasing so rapidly that some companies are getting nervous about the possibility of unfavorable publicity and the attendant potential for political backlash. If reducing costs and increasing short-term profits are the principal drivers, then global outsourcing will continue to occur regardless of how wide we open the door to guest-workers, simply because the comparative advantage of acquiring labor and facilities at overseas locations so far outweighs the costs of labor and facilities in the United States that there can be no effective competition. Paul Kostek, a former IEEE-USA President who currently chairs the American Association of Engineering Societies, has said as much in a recently published article entitled “How Can You Compete with an \$800 a Month Engineer?”

To make matters worse, we believe that by continuing to import guest workers through the H-1B and L-1 visa programs, U.S. based employers are actually facilitating and expediting the transfer of manufacturing and service jobs to lower-cost overseas locations. Foreign professionals are increasingly being brought to the U.S. specifically to facilitate outsourcing by taking advantage of their connections, language skills, and

familiarity with offshore business partners. Also, as more and more guest-workers return home, they take with them an acquired knowledge of the U.S. market and business practices, a network of contacts, and exposure to U.S. technology and its applications. With that knowledge, coupled with lower domestic labor costs, they are well positioned to compete with U.S. firms for outsourcing work.

The net result is that the United States is making itself increasingly dependent on foreign technical expertise both here and abroad. The best and brightest U.S. students who we would hope are attracted to scientific and engineering careers are smart enough to see that their career paths and earning potential is limited, and will choose alternative careers. Ultimately at risk is America's ability to innovate and to use technology to provide competitive advantage and ensure our national security.

Policy Recommendations

In order to restore the H-1B temporary admissions program to its original purpose; to reduce its adverse effects on job opportunities, wages and working conditions for citizens, legal permanent residents and foreign nationals who have been legally admitted to work temporarily in the United States; and to address current high levels of unemployment among high tech professionals in the United States, IEEE-USA urges Congress to:

1. Reduce H-1B Admissions Ceilings and Limit Authorized Stays

- The H-1B visa quota should be reduced to its originally authorized level of 65,000 per year when the current level of 195,000 expires at the end of FY 2003.
- Authorized stays should normally be limited to a single, 3-year, non-renewable term.
- Additional reforms that will facilitate the permanent admission of foreign professionals with highly specialized knowledge and skills, including foreign-born recipients of Ph.D. degrees in Science and Engineering should also be considered.

2. Strengthen Essential Safeguards for all Affected Workers

- Mandate that all H-1B workers be paid a prevailing wage that is not less than the median salary paid to similarly qualified U.S. workers in their intended area(s) of employment.
- Extend the applicability of the recruitment and retention attestation requirements that currently apply only to H-1B dependent employers to all employers of H-1B workers.

3. Improve H-1B Program Administration and Enforcement

- Increase visa processing efficiencies and reduce backlogs and delays by centralizing key administrative responsibilities that are currently shared by the Departments of Labor, Homeland Security and State.
- Enhance compliance and reduce fraud and abuse by authorizing random audits of labor condition applications and related H-1B visa applications.
- Add a credentials verification component to the application process to help ensure that H-1B workers meet minimum educational requirements.

4. Increase the Availability and Effectiveness of H-1B Technical Skills Training

- Give employers and affected individuals greater flexibility in the choice of qualified training providers than exists under current law.
- Consider the use of training vouchers to enable individuals to better meet specialized, short-term instructional requirements.

5. Improve the Timeliness and Utility of Statistical Reports

- Mandate publication of timely reports on numbers of visa applications received and visas issued as well as demographic information on temporary visa recipients, including their age, occupation, educational attainment, level of compensation and country of origin as well as the names and industry sectors of their sponsoring employers, and
- Commission detailed analyses of the impact of temporary work visa programs and global outsourcing of research, design and manufacturing jobs on national, regional and local labor markets for highly skilled professionals in the United States.

6. Address Immigration Reform: Another important and often ignored issue that Congress must consider when assessing the advantages and disadvantages of the H-1B, L-1 and other temporary admissions programs is the impact of these programs on foreign guest-workers themselves. Most are all too willing to accept relatively low wages and substandard working conditions in order to enter or remain in the United States. Many come seeking an opportunity to obtain permanent resident status, to become citizens and realize the American dream.

IEEE-USA shares the long-held belief that welcoming foreign nationals with the knowledge, skills and determination needed to succeed and making them citizens has helped to make America great. To the extent that demand for high tech professionals exceeds the current domestic supply, we urge Congress to make needed reforms in the nation's permanent, employment-based admissions system in the belief that an immigration policy based on the concept of "Green Cards, Not Guest-workers" will do far more to help America create jobs, maintain our technological competitiveness, and ensure our economic and military security than continuing to rely on temporary

admissions programs ever will. American policy should be to bring the best and brightest to the U.S. and keep them here.

7. Pass the U.S. Jobs Protection Act (S.1452/H.R. 2849): Congress should actively support the prompt enactment of the USA Jobs Protection Act. This bill was introduced on July 24th by Senator Chris Dodd (D-CT) as S. 1452 and in the House by Representative Nancy Johnson (R-CT) as H.R. 2849.

If enacted, this critically important legislative proposal will plug loopholes and prevent abuses of both the H-1B and L-1 temporary visa programs. More specifically, it includes provisions that will:

- Prohibit displacement of U.S. workers by L-1 visa holders,
- Require employers to pay L-1 workers prevailing wages,
- Prevent companies from leasing L-1 workers to other (secondary) employers,
- Require all employers of H-1B and L-1 workers to make U.S worker recruitment and retention attestations. This requirement currently only applies to a handful of so-called H-1B dependent employers, and
- Strengthen the Secretary of Labor's authority to investigate abuses of the H-1B and the L-1 temporary work visa programs

Conclusion

The bottom line is that U.S. employers are continuing to import significant numbers of skilled foreign professionals on H-1B and other temporary employment-based visas at a time when U.S. engineers, computer scientists and other information technology workers are experiencing sustained and historically high levels of unemployment.

Our collective ability to create and sustain high wage/high value added jobs for U.S. high tech professionals, including women and other traditionally underrepresented minorities, and ensure viable careers that will attract future generations into technical fields are the fundamental issues in the current debate about temporary, employment-based admissions and the global outsourcing of high-end manufacturing and service sector jobs. In this regard, it is critically important that Congress and this Committee maintain the broadest possible perspective and take a comprehensive look at the current and future health of the nation's high tech workforce and not limit its focus to the narrow issue of H-1B visas.