

Careers & Workforce Policy Committee
Teleconference Agenda Item #2
February 9, 2004

Subject: Proposed Position on Off-Shoring

The Career & Workforce Policy Committee is under pressure from the IEEE-USA Board of Directors to have a proposed position statement on the off-shoring issue ready for review by the Board at its meeting on February 12th. With that in mind, and in hopes of helping the committee sharpen its focus on this issue, Chris Brantley has cut and pasted together a draft position statement. It borrows from previous testimonies and statements, John's Steadman's recent interviews, Ron Hira's San Jose Mercury News op ed, Ron's proposed legislative strategy, and a briefing paper presented to OpCom in January.

This draft includes an item on government procurement in light of John Steadman's willingness to tackle that topic as well as Ron's recent email exchange with SJMN.

Action Requested: Edit and endorse a proposed position in time for consideration by the IEEE-USA Board of Directors on February 12, 2004

OFF-SHORING

(Draft Position Statement: 3 Feb. 2004)

Extensive off-shoring of U.S. engineering, computer, and information technology work poses a *serious* challenge to U.S. technology leadership worldwide, to our economic security, and to our national security. Prudent steps are needed to ensure that off-shoring is *managed* in ways that ultimately benefit the U.S. and its citizens. To that end, IEEE-USA recommends that:

- The government must regularly track the volume and nature of the jobs that are moving offshore.
- Government procurement rules should favor work done in the U.S. and should restrict off-shoring of work in any instance where there is not a clear long-term economic benefit to the U.S. or where the work supports technology *deemed* critical to U.S. economic or national security.
- U.S. *displaced worker assistance programs* should be redesigned to *better enable* displaced high-tech workers regain productive employment and to ensure that employed workers can acquire new skills needed to remain competitive.
- The H-1B and L-1 temporary visa programs should be reformed and any new free trade agreements should *incorporate* such reforms. These guest-worker programs for skilled workers have been used to import lower cost labor - resulting in the displacement of U.S. workers and exploitation of foreign workers – and to accelerate the off-shoring of jobs.
- A coordinated national strategy should be developed to sustain U.S. technological leadership and promote job creation in response to the concerted strategies being used by other countries to attract U.S. industries and jobs.

This statement was developed by the IEEE-USA's Career and Workforce Policy Committee and represents the considered judgment of a group of U.S. IEEE members with expertise in the subject field. IEEE-USA is an organizational unit of The Institute of Electrical and Electronics Engineers, Inc., created in 1973 to advance the public good, while promoting the careers and public-policy interests of the more than 235,000 electrical electronics, computer and software engineers who are U.S. members of the IEEE. The IEEE is the world's largest technical professional society. For more information, go to <http://www.ieeeusa.org>.

BACKGROUND

Off-shoring is being driven by several factors, including the desire of corporations to establish their business presence in potentially lucrative foreign markets and to take advantage of the lower costs of production and skilled labor in those markets.

Forrester Research projects that as many as 3.3 million white-collar jobs of all kinds and over \$136 billion in wages will be off-shored from the United States by 2015. Other industry analysts make similar projections about the off-shoring trend. Although the initial emphasis has been on service and technical support positions (e.g. Call Centers), the trend is expanding to include engineering and design services. It is clear that many of the jobs off-shored will be those formally held by U.S. engineers, computer scientists and information technology professionals.

The trend toward off-shoring is particularly unsettling for U.S. high-tech workers. The United States has already lost an estimated 3 million manufacturing jobs over the last decade. The American Electronics Association has reported that U.S. high-tech firms lost 560,000 jobs between 2001 and 2003, and would lose another 234,000 in 2004. In its Digital Economy 2003 report, the Department of Commerce reported the number of U.S. IT workers employed in all industries has declined by 8 percent since 2000. Although initially concentrated in the manufacturing sector and in low-skilled jobs, the Commerce Department indicates that "recent job losses have been widespread across almost all IT-goods and services producing industries, and across all IT skill levels." Some jobs are expected to return with a stronger economy, but the great majority are gone for good. Off-shoring will further compound that shrinkage.

The strong push for off-shoring of high-tech jobs also comes at a bad time for U.S. electrical engineers, computer scientists, and information technology professionals. Unemployment among U.S. electrical engineers, computer scientists, and information technology professionals has been increasing over the past three years and reached historically high levels in 2003. The unemployment picture is further clouded by uncertainty about the numbers of high-tech workers who are under-employed or who have left engineering or information technology for jobs in other fields.

The Consequences of Off-Shoring

Whether the U.S. as a nation will benefit from the increased off-shoring of jobs will ultimately depend on how *the process is managed*. There will clearly be winners and losers. Potentially adverse consequences include loss of employment opportunities and income for technical professionals, loss of payroll and income taxes at the national, state and local levels, growing trade deficits in goods and services, transfer of investment capital *and intellectual property* to overseas locations, and increasing dependence on foreign sources for consumer products and defense hardware and capabilities.

We are particularly concerned that the global outsourcing of high wage/high value-added engineering and technical jobs could threaten U.S. leadership in technological innovation, which has implications for our national security as well as our economic competitiveness.

Declining job opportunities and downward pressures on wages and working conditions that will occur as more and more scientific and engineering jobs are shifted to lower cost offshore locations may discourage many of America's best and brightest young people from pursuing careers in science and engineering.

Off-shoring also frequently *results in* the export of intellectual property and sensitive personal data, including medical and credit information. U.S. laws that protect that information and safeguard privacy do not have extraterritorial application. As a consequence, the U.S. government, U.S. corporations and U.S. citizens are dependent on foreign laws to protect their interests. The risk posed to their interests by individuals and organizations who would take advantage of weak laws, loopholes, and limited access to enforcement is not insignificant.

Proposed Policy Recommendations

Providing Good Data for Policy Analysis: At present, the U.S. government does not have a program or mechanism for collecting data about off-shoring or its implications for jobs, technology and capital *investment in the United States*. The lack of objective data forces policy-makers to rely on speculative and often self-serving projections and distracts discussion from the real issue of solving the problems created by offshore outsourcing.

Government Procurement: Federal, state *and local* governments are a significant consumer of *high tech goods and services*. Government spending increases aggregate demand and helps create jobs. If government contracts are directed overseas through offshore outsourcing, then the benefits of that spending for the US economy may be significantly diminished because the money multiplier effects will benefit the country where the work is performed.

There is also an important connection between federal procurement and innovation. There is a symbiotic relationship between government procurement and industry R&D. Much of IBM's early computing research, for example, was funded through independent research & development set-asides in federal contracts. The National Academy of Sciences report, Funding a Revolution: Government Support for Computing Research, provides *dramatic evidence of the many benefits of these relationships, for individual companies and educational institutions, as well as for their employees, their families and the communities in which they live.*

The argument is often made that off-shoring of government contracts can result in cost savings, which are beneficial to U.S. taxpayers and very attractive politically at a time of mounting federal and state budget deficits. In many cases, this argument is based on

short-term assessments of *costs and benefits*, rather than on in-depth analyses of the long-term financial impacts on employment, social services, and the domestic tax base.

In cases in which there are *demonstrable* long term financial benefits to be derived from off-shoring government contracts, then it is wise policy to do so. In cases where the long-term benefits are not proven, or where the contract involves *technologies deemed* critical to U.S. competitiveness and national security, or where *appropriate* restrictions would serve other important social goals, then restrictions on off-shoring of government procurement contracts are warranted.

Assisting Displaced Workers: Congress should rethink how U.S. workforce assistance programs can best help displaced high-tech workers become productive again. That is no easy task. *What should people be retrained for or prepared to do? Will it involve skills or functions that can't be performed just as effectively and much less expensively overseas?* And who should/will provide the very substantial financial resources that will be required to provide such training? These are difficult questions and the history of government-sponsored retraining programs, *especially* for skilled workers, *has not been very successful*. But there are two steps that should be taken immediately:

- The federal trade adjustment assistance program's eligibility guidelines should be expanded to cover all high-tech workers and others whose jobs are off-shored. Originally adopted to aid manufacturing workers displaced as a result of free trade agreements, the TAA extends unemployment compensation for up to two years and offers training, job search, and health insurance coverage assistance to U.S. workers whose jobs have been outsourced to foreign competition.
- The H-1B visa petition fee for training investments by the Department of Labor should be redirected to *more effectively* assist displaced high-tech workers.

National Competitiveness Strategy: The United States needs a coordinated national strategy designed to *help U.S. based companies* maintain their technological leadership, improve their manufacturing *capabilities*, and promote job creation in response to the concerted strategies being used by other countries to attract U.S. industries and jobs. The key elements of that strategy include:

- Increasing Federal investments in research and development, with an emphasis on basic and applied research in the physical sciences and engineering geared toward generic and enabling technology, productivity tools, and new and emerging areas of technology such as nanotechnology that can be developed into products manufactured in the United States.
- Instituting a permanent R&D tax credit to provide a stable incentive for industry planning and investment.
- Reforming the tax system to create incentives and remove barriers to savings, capital formation, and infrastructure investment in the U.S.

- Improving education and training at all levels, from K-12 math and science education to life-long learning to help workers enhance their productivity and adapt to changing corporate needs.
- Ensuring a level playing field in trade, including access to foreign markets and enforcement of export controls that protect U.S. intellectual property and technology deemed critical for economic and national security.

H-1B/L-1 Visa Reform: The H-1B visa program was originally designed to enable U.S. employers meet short term needs for highly skilled professionals deemed to be in short supply in the United States.. The L-1 visa program was designed to allow multi-national companies to transfer employees with managerial responsibilities or highly specialized knowledge from overseas locations to branch offices, subsidiaries or affiliates in the United States. Both programs are being used in ways not intended by Congress. It is not just an issue of displacing U.S. high-tech workers with H-1B and L-1 foreign workers with similar skills and at lower wages, the H-1B and L-1 programs are actually facilitating the export of U.S. jobs and innovation.

Through these programs, enterprising foreign workers are brought into the U.S. where they are trained by some of the best companies in the world and gain valuable experience and business contacts in their fields. Many return to their own countries to establish or work for new entrepreneurial businesses that compete in the U.S. market. Former H-1B and L-1 employees have significantly enhanced the competitiveness of India's IT services industry, for example. Moreover, as confirmed in a recent study the Center for Industrial Competitiveness at the University of Massachusetts, H-1B workers are being hired specifically to help *foreign-owned* companies negotiate and manage contracts within the United States.

IEEE-USA has outlined its recommendations for reforming the H-1B and L-1 visa program in supporting position statements:

The H-1B Visa

<http://www.ieeeusa.org/forum/POSITIONS/h1b.html>

The L-1 Visa for Intracompany Transfers

<http://www.ieeeusa.org/forum/POSITIONS/L1visa.html>

Ensuring a Strong High-Tech Workforce for the 21st Century

<http://www.ieeeusa.org/forum/POSITIONS/21cworkforce.html>

Selected Bibliography

Digital Economy 2003, U.S. Department of Commerce (Dec. 2003).

URL: <http://www.esa.doc.gov/DigitalEconomy2003.cfm>

Funding a Revolution: Government Support for Computing Research, National Research Council (1999). URL: <http://books.nap.edu/books/0309062780/html/index.html>

Tech Employment Update, American Electronics Alliance (March 2003). URL: http://www.aeanet.org/publications/idmk_endofyear2002.asp

The Role of H-1B Visas in the Globalization and Restructuring of IT Services, Hal Salzman, Center for Industrial Competitiveness, University of Massachusetts (Oct. 2003). URL: http://www.uml.edu/centers/CIC/pdf/h-1b_it_industry.pdf

Q:cpc/2004positions/offshoring.020304