

he was inspired, he was engaging, and he was incredibly effective. The workshop that he offered was called Memoir Writing, and it was always the most heavily subscribed of all of the workshops we offered. There was always a waiting list. Alan Alda worked on his memoirs as a student in Frank McCourt's memoir writing class. Anne Bancroft, prior to her passing, was a student in Frank McCourt's memoir writing class.

That class was really a textbook in how much to teach, how to engage students, how to turn them on to a subject matter, and how to get the most out of them—the very essence of teaching—and he did it with enormous humor, with great charm, and was almost effortless in his ability to connect with students.

So I certainly hope that the Congress will unanimously pass this resolution. He was a man richly deserving of any accolade that he might receive. He will be terribly missed. He serves as an example of what good teaching is and how valuable good teaching is to our Nation's students.

Mr. CHAFFETZ. Mr. Speaker, we have no additional speakers, but I would urge the passage of House Resolution 743. It's an honor for me to participate in these proceedings, and I urge the adoption of this resolution.

With that, I yield back the balance of my time.

Mr. LYNCH. I thank the gentleman from Utah for his kind remarks, and I want to thank both the gentlemen from Connecticut, Mr. COURTNEY and Mr. MURPHY, and also the gentleman from New York (Mr. BISHOP) for their wonderful work and leadership on this resolution.

Mr. MCMAHON. Mr. Speaker, I rise in support of H. Res. 743 which honors the life and work of accomplished Pulitzer-prize winning author Frank McCourt. I am proud to be a cosponsor of this important resolution.

Frank McCourt was an exceptional author and educator whose contributions are valued throughout America. He is remembered for his great literary masterpieces, including his well known autobiography, "Angela's Ashes," which tells his story of growing up in the slums of Brooklyn, New York and Limerick City, Ireland.

Frank McCourt's life is the story of a true American Dream. As a child of Irish immigrants, McCourt grew up during the depression and faced many grave challenges. McCourt was abandoned by his father, who was an alcoholic, at an early age. The family had seven children, three of whom died from disease. McCourt found himself struggling to hold down a job in order to feed his mother and surviving siblings. He worked to provide a stable and healthy environment for his family during a time of worldwide economic depression.

McCourt dropped out of school at the age of 13 and worked a series of janitorial jobs in New York hotels. After serving in the United States Army, Frank McCourt was granted a formal education at New York University even though he never received the required high school diploma.

Frank McCourt's professional career began as an educator in 1958 when he landed his first job teaching English at Ralph R. McKee Career & Technical High School (McKee) located in my district of Staten Island, New York. McCourt went on to teach in the New York City Public school system for 27 years. McCourt always had a passion for creative writing and storytelling, and it was through his work at McKee high school where he developed the idea for "Angela's Ashes."

Frank McCourt was once quoted in an interview saying that, "children are the most precious material we have in our country." McCourt was a great example of a dedicated teacher and was an outspoken advocate for education. McCourt viewed teaching as the single most important profession in the country because teachers pave the way for our children's future and enhance their lives.

When Frank McCourt passed away earlier this year, our Nation lost a great man, teacher, author, and friend. Mr. Speaker, I strongly urge my colleagues to support H. Res. 743 to honor the life, work and contributions of Frank McCourt.

Mr. MURPHY of Connecticut. Mr. Speaker, I rise today to celebrate the life of author and educator Frank McCourt.

As many know, Frank McCourt died on July 19 at the age of 78. As an author, he was best known for his best-selling series of memoirs, including the Pulitzer-prize winning 1996 work *Angela's Ashes*. Years before he became a literary icon, however, he was best known among thousands of New York City high school students as a passionate and committed teacher, holding his classes spellbound with his rapturous stories. But to me, and to so many others who call Northwest Connecticut home, he was a friend.

While Frank was an Irishman and a New York City native to the last, it was in Roxbury, Connecticut, that he spent years with his beloved wife, Ellen, at his side. Frank was dearly-loved throughout his community as a warm, friendly neighbor who was always willing to roll up his sleeves and get involved in local causes and charities. The wit and generous spirit that defined his writing was familiar to anyone who knew Frank—he was a fiery, vital presence.

Frank spent his life shaping young people's minds as a teacher and sharing his writings with the world. This resolution before us today is dedicated to his memory, and to Ellen and the McCourt family. On behalf of myself and Representative COURTNEY, who helped make this resolution possible, as well as the millions around the world whose lives he touched, Frank McCourt will be missed.

Mr. LYNCH. I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Massachusetts (Mr. LYNCH) that the House suspend the rules and agree to the resolution, H. Res. 743.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the resolution was agreed to.

A motion to reconsider was laid on the table.

## ESTABLISHMENT OF A DEMONSTRATION PROGRAM ON GAS TURBINES

Mr. TONKO. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 3029) to establish a research, development, and technology demonstration program to improve the efficiency of gas turbines used in combined cycle power generation systems, as amended. The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 3029

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### SECTION 1. HIGH EFFICIENCY GAS TURBINES.

(a) IN GENERAL.—The Secretary of Energy shall carry out a multiyear, multiphase program of research, development, and technology demonstration to improve the efficiency of gas turbines used in power generation systems and to identify the technologies that ultimately will lead to gas turbine combined cycle efficiency of 65 percent or simple cycle efficiency of 50 percent.

(b) PROGRAM ELEMENTS.—The program under this section shall—

(1) support first-of-a-kind engineering and detailed gas turbine design for megawatt-scale and utility-scale electric power generation, including—

(A) high temperature materials, including superalloys, coatings, and ceramics;

(B) improved heat transfer capability;

(C) manufacturing technology required to construct complex three-dimensional geometry parts with improved aerodynamic capability;

(D) combustion technology to produce higher firing temperature while lowering nitrogen oxide and carbon monoxide emissions per unit of output;

(E) advanced controls and systems integration;

(F) advanced high performance compressor technology; and

(G) validation facilities for the testing of components and subsystems;

(2) include technology demonstration through component testing, subscale testing, and full scale testing in existing fleets;

(3) include field demonstrations of the developed technology elements so as to demonstrate technical and economic feasibility; and

(4) assess overall combined cycle and simple cycle system performance.

(c) PROGRAM GOALS.—The goals of the multiphase program established under subsection (a) shall be—

(1) in phase I—

(A) to develop the conceptual design of advanced high efficiency gas turbines that can achieve at least 62 percent combined cycle efficiency or 47 percent simple cycle efficiency on a lower heating value basis; and

(B) to develop and demonstrate the technology required for advanced high efficiency gas turbines that can achieve at least 62 percent combined cycle efficiency or 47 percent simple cycle efficiency on a lower heating value basis; and

(2) in phase II, to develop the conceptual design for advanced high efficiency gas turbines that can achieve at least 65 percent combined cycle efficiency or 50 percent simple cycle efficiency on a lower heating value basis.

(d) PROPOSALS.—Within 180 days after the date of enactment of this Act, the Secretary shall solicit grant and contract proposals from industry, universities, and other appropriate parties for conducting activities under this Act. In selecting proposals, the Secretary shall emphasize—

(1) the extent to which the proposal will stimulate the creation or increased retention of jobs in the United States; and

(2) the extent to which the proposal will promote and enhance United States technology leadership.

(e) **COMPETITIVE AWARDS.**—The provision of funding under this section shall be on a competitive basis with an emphasis on technical merit.

(f) **COST SHARING.**—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to an award of financial assistance made under this section.

(g) **LIMITS ON PARTICIPATION.**—The limits on participation applicable under section 999E of the Energy Policy Act of 2005 (42 U.S.C. 16375) shall apply to financial assistance awarded under this section.

(h) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Secretary for carrying out this section \$85,000,000 for each of fiscal years 2011 through 2014.

The **SPEAKER** pro tempore. Pursuant to the rule, the gentleman from New York (Mr. **TONKO**) and the gentleman from Texas (Mr. **HALL**) each will control 20 minutes.

The Chair recognizes the gentleman from New York.

#### GENERAL LEAVE

Mr. **TONKO**. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 3029, the bill now under consideration.

The **SPEAKER** pro tempore. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. **TONKO**. Mr. Speaker, I yield myself such time as I may consume.

My bill establishes a research, development, and demonstration program through the Department of Energy to improve the efficiency of natural gas turbines used in electric power generation systems. The Department had a similar public-private partnership research program in the 1990s that led to technologies used in turbines today. Resurrecting this capability is essential if our country is going to be the energy technology leader of the world.

Currently, the United States uses natural gas for nearly 20 percent of our power generation, and with the recent discovery of natural gas in different regions of our country, that percentage is most likely to grow.

Efficiency is paramount in turbines. The most advanced combined-cycle gas turbine systems today are capable of reaching somewhere near 60 percent efficiency. The goal of this bill is to develop systems that achieve up to 65 percent efficiency.

The energy and fuel savings created by more efficient turbines will help ratepayers save more than a billion dollars per year in fuel costs alone. Deployment of 65 percent efficient gas turbines throughout the country would result in significant reductions in fuel use, leading to savings in electricity costs of some \$180 billion through the year 2040.

Energy efficiency should be our fuel of choice, a fuel we need to drill and

mine like we currently drill for oil and mine coal. That's exactly what this bill does, Mr. Speaker. It makes energy efficiency our fuel of choice.

Just 1 percentage point improvement in efficiency would result in CO<sub>2</sub> emissions reductions of 4.4 million tons per year, as well as palpable reductions in NO<sub>x</sub>, SO<sub>x</sub>, and other harmful emissions.

In addition to the environmental benefits and energy and fuel savings, this bill promotes United States technology leadership, putting our country in a position to assume a greater share of the worldwide energy market by creating and retaining high-value domestic jobs in turbine manufacturing. Furthermore, many technologies developed under this program can be retrofitted onto the existing fleet of turbines.

This program will create thousands of domestic jobs in a variety of technology sectors. There are potential jobs in our labs, jobs in our factories, and jobs in our construction sector. This bill is a positive step toward restoring our energy, economy, creating clean-energy jobs, and enhancing our energy security.

Getting this legislation to the floor today would not have been possible without the help of my colleagues on the House Science and Technology Committee. After the full committee markup of this bill, we continued to work to address the concerns of my colleagues, Mr. **HALL**, Mr. **BILBRAY**, and Ms. **KOSMAS**. With their help and leadership, we were able to expand the scope of this bill to include simple-cycle turbine systems, in addition to combined-cycle.

I want to thank them for their suggestions and working with me to create an even stronger bill. In so doing, we also modestly expanded the authorization levels for the bill to reflect the inclusion of simple-cycle turbine systems.

I want to thank Ranking Member **HALL**, his staff, and all of my Science and Technology Committee colleagues for continuing to work with me to improve this bill. Our chairman has been most helpful.

Finally, I also want to thank Mr. **INGLIS** for understanding the importance of this legislation and joining me as a cosponsor of this bill.

Mr. Speaker, I reserve the balance of my time.

Mr. **HALL** of Texas. Mr. Speaker, I yield myself such time as I may consume.

I rise in support of H.R. 3029, to establish a research, development, and technology demonstration program to improve the efficiency of gas turbines used in combined-cycle power generation systems. The bill we're considering on the floor today is a slightly different version than the bill that was passed out of the Committee on Science and Technology on July 29 of this year.

Two changes were made between committee and floor consideration.

The first is the addition of simple-cycle gas turbine efficiency to the combined-cycle gas turbine efficiency already called for in the bill. This addition allows for increased competition as well as beneficial efficiencies across the spectrum of gas turbines. The second change increases the annual authorization level from \$65 million to \$85 million for fiscal years 2011 through 2014. That will expand eligible participants in the R&D program.

Prior to committee consideration of H.R. 3029, the text as introduced on June 24, 2009, was included in H.R. 2454, the American Clean Energy and Security Act of 2009, which passed the House 2 days later. In the event that this version before us here today passes the House, we would prefer that this language be substituted in place of the language that was included in H.R. 2454, should that bill go to conference with the Senate.

Natural gas is the cleanest fossil fuel and is a highly efficient form of energy. It has fewer impurities and its combustion generally results in less pollution and has therefore become a very popular choice for electricity generation. While we currently have an abundant supply of natural gas in our country, we should always strive to use our resources in the most efficient way. This bill will help us do that with this precious domestic resource.

Mr. Speaker, we have no more speakers, and I yield back the balance of my time.

Mr. **TONKO**. Let me again thank those of the committee and subcommittee respectively, Chairman **GORDON** and Chairman **BAIRD**, for their tremendous help in this measure, along with the ranking members on the committee.

Before we close this debate, I think it's important to acknowledge the numerous letters of support that we have received dealing with this legislation. We have letters of support from the Gas Turbine Association, from General Electric, from Solar Turbines, Strategic Power Systems, Inc., and Florida Turbine Technologies, Inc.

Having strong industry support is vital if we're going to be successful, Mr. Speaker, in moving forward with an innovation economy. We all must work together to move our country and our economy forward to a greener and brighter future. The bill before the House is a measure that will obviously underscore the value of energy efficiency and will allow us to make use of natural gas turbines in a way that promotes that added 5 percent of efficiency that will translate to billions of dollars of savings and economic and environmental savings that will come from the efforts of this bill.

I yield back the balance of my time.

The **SPEAKER** pro tempore. The question is on the motion offered by the gentleman from New York (Mr. **TONKO**) that the House suspend the rules and pass the bill, H.R. 3029, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the yeas have it.

Mr. TONKO. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX and the Chair's prior announcement, further proceedings on this motion will be postponed.

□ 1530

## ENERGY AND WATER RESEARCH INTEGRATION ACT

Mr. TONKO. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 3598) to ensure consideration of water intensity in the Department of Energy's energy research, development, and demonstration programs to help guarantee efficient, reliable, and sustainable delivery of energy and water resources, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 3598

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### SECTION 1. SHORT TITLE.

This Act may be cited as the "Energy and Water Research Integration Act".

### SEC. 2. ENERGY AND WATER RESEARCH AND ASSESSMENT.

(a) IN GENERAL.—The Secretary of Energy shall assess each of the energy research, development, and demonstration programs and projects of the Department of Energy and identify those programs and projects into which it is appropriate to integrate water considerations. In carrying out this section the Secretary shall, as appropriate—

(1) seek to advance energy and energy efficiency technologies and practices that would—

(A) minimize freshwater withdrawal and consumption;

(B) increase water use efficiency; and

(C) utilize nontraditional water sources with efforts to improve the quality of that water;

(2) consider the effects climate variability and change may have on water supplies and quality for energy generation and fuel production; and

(3) improve understanding of the energy required to provide water supplies and the water required to provide reliable energy supplies throughout the United States.

(b) STRATEGIC PLAN.—

(1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary of Energy shall develop a Strategic Plan (in this section referred to as the "Strategic Plan") outlining the research, development, and demonstration needs for the programs and projects identified under subsection (a), in accordance with subsections (a) through (c) of this section, as appropriate.

(2) MILESTONES AND SPECIFIC CONSIDERATIONS.—In carrying out the development and updating of the Strategic Plan in accordance with this subsection, the Secretary shall evaluate and, as appropriate, establish technical milestones for—

(A) new advanced cooling technologies for energy generation and fuel production technologies;

(B) performance improvement of existing cooling technologies and cost reductions associated with using those technologies;

(C) innovative water reuse, recovery, and treatment in energy generation and fuel production;

(D) technology development for carbon capture and storage systems that utilize efficient water use design strategies;

(E) technologies that are life-cycle cost effective;

(F) systems analysis and modeling of issues relating to the energy required to provide water supplies and the water required to provide reliable energy supplies throughout the United States;

(G) technologies to treat and utilize produced waters discharged from oil, natural gas, coalbed methane, and mining activities;

(H) advanced materials for the use of nontraditional water sources for energy generation and fuel production;

(I) biomass production and utilization and the impact on hydrologic systems;

(J) technologies that reduce impacts on water from energy resource development;

(K) increases in energy efficiency of water distribution and collection systems;

(L) technologies for energy generation from water distribution and collection systems; and

(M) any other area of the energy-water nexus that the Secretary considers appropriate.

(3) INTERAGENCY COLLABORATION AND NON-DUPLICATION.—In carrying out the development and updating of the Strategic Plan in accordance with this subsection, the Secretary shall, where appropriate, work collaboratively with other Federal agencies operating related programs and avoid duplication.

(4) INTRA-AGENCY COORDINATION AND NON-DUPLICATION.—In carrying out the development and updating of the Strategic Plan in accordance with this subsection, the Secretary shall coordinate and avoid duplication of activities across programs and projects of the Department of Energy, including with those of the National Laboratories.

(5) RELEVANT INFORMATION AND RECOMMENDATIONS.—In carrying out the development and updating of the Strategic Plan in accordance with this subsection, the Secretary shall consider and incorporate, as appropriate, relevant information and recommendations, including those of the National Water Availability and Use Assessment Program under section 9508(d) of the Omnibus Public Land Management Act of 2009 (42 U.S.C. 10368(d)).

(6) NONGOVERNMENTAL PARTICIPATION.—In carrying out the development and updating of the Strategic Plan in accordance with this subsection, the Secretary shall consult and coordinate with a diverse group of representatives from research and academic institutions and industry who have expertise in technologies and practices relating to the energy required to provide water supplies and the water required to provide reliable energy supplies throughout the United States.

(7) SUBMISSION TO CONGRESS.—Not later than 9 months after the date of enactment of this Act, the Secretary shall submit to Congress the Strategic Plan.

(8) UPDATING THE STRATEGIC PLAN.—Not later than 3 years after the date of enactment of this Act, the Secretary shall utilize relevant information produced by Federal Government agencies, academia, and industry to update the Strategic Plan, and submit a report to Congress describing the changes from the initial Strategic Plan.

(c) IMPLEMENTATION.—

(1) IN GENERAL.—The Secretary of Energy shall implement the Strategic Plan, as ap-

propriate, in carrying out energy research, development, and demonstration programs of the Department of Energy.

(2) APPLICATION TO PROJECTS.—Not later than 3 months after the submission of the report to Congress in subsection (b)(7), the Secretary shall as appropriate apply the Strategic Plan to projects—

(A) identified as the most energy and water intensive; and

(B) with the most potential to achieve the purposes of this section.

(3) DELAY OR DISRUPTION.—In carrying out this subsection, the Secretary shall ensure that no program or project of the Department is unnecessarily delayed or disrupted.

(d) REPORTS.—Not later than 2 years after the date of enactment of this Act, and at least once every 2 years thereafter, the Secretary shall transmit to Congress a report on its findings and activities under this section.

(e) ADDITIONAL ACTIVITIES.—The Secretary may provide for such additional research, development, and demonstration activities as may be appropriate to integrate water considerations into the research, development, and demonstration activities of the Department as described in subsection (a).

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section \$60,000,000 for each of the fiscal years 2011 through 2015.

### SEC. 3. ENERGY-WATER ARCHITECTURE COUNCIL.

(a) IN GENERAL.—The Secretary of Energy, in coordination with other relevant Federal agencies, shall establish an Energy-Water Architecture Council to promote and enable improved energy and water resource data collection, reporting, and technological innovation. The Council shall consist of—

(1) representation from each Federal agency that conducts research related to energy and water resource data; and

(2) non-Federal members, including representatives of research and academic institutions and industry, who have expertise in technologies and practices relating to the energy required to provide water supplies and the water required to provide reliable energy supplies throughout the United States.

(b) FUNCTIONS.—The Council shall—

(1) make recommendations on the development of data collection and data communication standards and protocols to agencies and entities currently engaged in collecting the data for the energy required to provide water supplies and the water required to provide reliable energy supplies throughout the United States;

(2) recommend ways to make improvements to Federal water use data to increase understanding of trends in energy generation and fuel production;

(3) recommend best practices for utilizing information from existing monitoring networks to provide nationally uniform water and energy use and infrastructure data; and

(4) conduct annual technical workshops, including at least one regional workshop annually, to facilitate information exchange among Federal, State, and private sector experts on technologies that encourage the conservation and efficient use of water and energy.

(c) REPORTS.—Not later than 1 year after the date of enactment of this Act, and at least once every 2 years thereafter, the Council, through the Secretary of Energy, shall transmit to the Congress a report on its findings and activities under this section.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section \$5,000,000 for each of the fiscal years 2011 through 2015.