Implementation of the American Recovery and Reinvestment Act (ARRA) Treasury grant program for alternative energy projects

Part of the Ernst & Young United States Renewable Energy Attractiveness Indices series

20 July 2009

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Quality In Everything We Do

Today's moderator

Andrew Miller

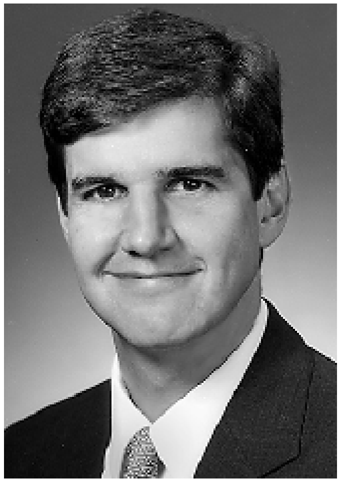
Americas Power & Utilities Industry Tax Leader
Ernst & Young LLP

Today's agenda

- Overview of the Treasury grant in lieu of tax credit program enacted as part of ARRA
- Treasury Department guidance: a look at the details
- Issues and related implications arising from the guidance
  - Impact on renewable energy projects
- Other guidance pending
- Stimulus funding: federal and state
- Climate change legislation: the outlook

Today's presenters

Michael Bernier
Ernst & Young LLP



Paul Naumoff
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First Wind

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ARRA: key energy tax provisions

- **Extension and modification of energy Production Tax Credit (PTC)**
  - Extends the placed-in-service date for wind facilities through 31 December 2012
  - Extends the placed-in-service date for certain other qualifying facilities (i.e., closed-loop biomass, open-loop biomass, geothermal, small irrigation, hydropower, landfill gas, waste-to-energy and marine renewables) through 31 December 2013
- **Temporary election to claim the Investment Tax Credit (ITC) in lieu of the PTC**
  - Currently, facilities that produce electricity from solar energy eligible to take 30% ITC in year facility is placed in service
  - Allows facilities eligible for the Section 45 PTC to elect to receive the 30% ITC under Section 48 for the duration of the Section 45 extension
- **Modifications to the business investment tax credit (Section 48)**
  - Removes the cap on the ITC for small wind property and eliminates the current law basis reduction for subsidized energy financing
- **Advanced energy investment tax credit**
  - Creates a new 30% ITC for facilities engaged in the manufacture of advanced energy property
  - Allows the US Department of the Treasury, in consultation with the US Department of Energy (DOE), to allocate up to $2.3 billion for projects through a competitive application process

ARRA Section 1603 Treasury grant program

- The program allows those eligible for Section 48 Investment Tax Credits to receive a non-taxable cash grant in lieu of the Investment Tax Credits.
- The energy property must be utilized in a trade or business or held for the production of income in order to qualify.
- To be eligible to receive the grant, taxpayers must either place the energy property in service by 31 December 2010 or begin construction by that date and subsequently place the energy property in service before:
  - 1 January 2013 for wind
  - 1 January 2014 for other renewable energy facilities defined in IRC Section 45
  - 1 January 2017 for pre-ARRA "energy property," including solar and fuel cells

Polling question

Opinion check

Opinion check

Now that we have the long-awaited guidance regarding Treasury's grant in lieu of ITC program, what kind of effect do you think it will have on new installed capacity for 2009?

A. More new installed capacity than 2008
B. More new installed capacity than 2007
C. More than 2008 but less than 2007
D. Too late to have a meaningful impact in 2009
E. Not applicable

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Overview of the guidance
Notice 2009-52

- Application procedures
- Applicant eligibility
- Property and payment eligibility
  - Commence construction
  - Units of property
  - Required documentation
  - Types of property
- Eligible basis
- Leased property
- Recapture
- Miscellaneous provisions

Application procedures

- Applications may be submitted online.
- Applications may not be submitted until a property is under construction.
  - Treasury will decide eligibility and issue payment within 60 days for projects already placed in service.
  - If the application is submitted while under construction, supplemental information will be due within 90 days of the placed-in-service date, Treasury will decide eligibility and issue payment within 60 days from the receipt of supplemental information.
- All applications must be received by 1 October 2011
- If Treasury decides that sufficient information was not submitted it will notify the taxpayer, who will have 21 days to submit additional information.

Applicant eligibility

- Persons not eligible:
  - Federal, state or local government, political subdivisions, etc.
  - Organization described in Section 501(c), exempt in Section 501(a)
  - Entity described in Section 54(j)(4)
  - Any partnership or other pass-through entity, any direct or indirect partner (or other holder of an equity or profits interest) that is an organization or entity described above
    - Unless owned through taxable C corporation
- Real estate investment trusts and cooperatives described in Section 1381(a) not pass-through entities
- Foreign person or entity qualifying under Section 168(h)(2)(B)
- Applicant eligibility determined as of the time application is received

Definition of "begin construction"

- Construction begins when "physical work of a significant nature begins." For applicants that manufacture, construct or produce property for their own use, construction begins when significant physical work begins.
- For property that is manufactured or constructed for the applicant by another person under a written binding contract, construction begins when significant physical work begins under the contract.
- When determining if construction has begun, multiple units located on the same site that will operate as a larger unit may be treated as a single unit of property for determining the beginning of construction and the date property is placed in service.
- Safe harbor:
  - Commenced construction and sufficient physical work:
    - An applicant may treat physical work of a significant nature as beginning when it pays (for cash-basis taxpayers) or incurs (for accrual-basis taxpayers) more than 5% of the total cost of the property (excluding cost of land and preliminary activities).
    - If the property is manufactured or constructed by another person, this safe harbor must be met by the applicant and not the other person. For determining the safe harbor, applicants must apply the economic performance standard in Section 461(h).

Required documentation

- As part of the application process, the applicant will be required to provide the following documentation:
  - A signed and completed application form
  - A signed terms and conditions statement
  - Complete payment information
  - Final engineering design documents
  - A detailed breakdown of all costs included in the basis of the property
  - Other (if applicable):
    - Documentation that the property meets eligibility requirements specified in Sections 45 and 48 of the IRC
    - FERC certifications and licenses
    - Report certifying that the property has been installed, tested and is ready and capable of being used for its intended purpose
    - A cost certification by an independent accountant in the event that the basis of the property exceeds $500,000

Types of property/eligible basis

- Property eligible to receive a grant — “specified energy property”
  - Tangible property (not including a building) that is an integral part of the facility
    - Integral part of the activity
    - Property is integral part of a qualified facility if property is used directly in the qualified facility, essential to the completeness of the activity performed in that facility and is located at the site
  - Tangible property defined in Treas. Reg. 1.48-1(c) and (d)
  - Depreciable property (or amortization)
- Basis of property determined applying general rules for federal income tax purposes (Section 1012)
  - Unreduced for depreciation
  - Exclude costs deducted in year paid or incurred (Section 179, intangible drilling costs, etc.)
  - Basis placed in service after 2008

Leased property

- Lessor election to pass through grant payment to lessee
  - Property is eligible property if owned by lessee
  - Lessor waives right to grant, PTC and ITC
  - Both lessor and lessee qualified for grant
    - Real estate investment trusts, regulated investment companies, mutual savings banks — ineligible for this purpose
- Special rule for sale-leaseback transactions
  - Original use to lessee
  - Sale-leaseback within three months placed in service
  - Lessee and lessor must not elect to preclude application of sale-leaseback rules

Recapture of the grant

- The grant must repaid if the property is disposed of to a disqualified entity or ceases to be qualified property within five years from the placed-in-service date.
- Recapture is not triggered by the a sale to a qualified person if the property continues to be qualified property.
  - The buyer and seller must agree to be jointly liable for recapture.
  - This is a major difference from to tax credits realized under the Section 48 rules.

Miscellaneous provisions

- REITs are eligible to participate in the program to the extent allowed by Section 50.
- Grant payments must be normalized by regulated utilities.
- The grant can be assigned in certain situations.

Polling question

Opinion check

Opinion check

Now that we have guidance …

A. I will participate in the Treasury grant program for all of my projects.
B. I will participate in the Treasury grant program for some of my projects.
C. I will not participate in the Treasury grant program.
D. Not applicable

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Issues and related implications

- Qualifying basis:
  - Guidance reference to Treas. Reg. 1.48-1(c) and (d)
  - “Integral” part of the activity performed by the qualifying facility
  - Facility components for wind and open-loop biomass (see Rev. Rule 94-31 and Notice 2008-60)
- Blocker “C” corporations
- Recapture rules
  - Grant versus ITC
- At-risk rules: individual investors and closely held corporations
  - Grant versus ITC

What does this mean for financing a project?

- Different structures:
  - (Grant Pre-tax After-tax Partnership Structure) G-PAPS
  - Sale leaseback
  - Regular project finance
- Larger projects are likely to still use tax equity.
- The project lender is still in first position and the grant can be assigned directly to them.
- There will likely be different accounting for developers and tax equity investors.

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Advanced Energy Manufacturing Investment Tax Credit (Section 48C)

- Definition of a qualifying advanced energy project under Section 48C:
  - A project which re-equips, expands or establishes a manufacturing facility for the production of:
    - Property designed to be used to produce energy from the sun, wind, geothermal deposits or other renewable resources
    - Fuel cells, microturbines or an energy storage system for use with electric or hybrid-electric motor vehicles
    - Electric grids to support the transmission of intermittent sources of renewable energy, including storage of such energy
    - Property designed to capture and sequester carbon dioxide emissions
    - Property designed to refine or blend renewable fuels or to produce energy conservation technologies (including energy-conserving lighting technologies and smart grid technologies)
    - New qualified plug-in electric-drive motor vehicles, qualified plug-in electric vehicles (as defined by Section 30(d)) or components that are designed specifically for use with such vehicles, including electric motors, generators and power control units
    - Other advanced energy property designed to reduce greenhouse gas emissions as may be determined by the Secretary of the Treasury

Advanced Energy Manufacturing Investment Tax Credit (Section 48C)

- Bingaman-Baucus colloquy gives us some insight:
  - Projects that provide the greatest domestic job creation, both direct and indirect, during the credit period
  - Projects that will provide the greatest net impact in avoiding or reducing air pollutants, or anthropogenic emissions or greenhouse gasses
  - Projects that have the greatest potential for technological innovation and commercial deployment: “might implement this standard by preferring projects that are first- or second-of-a-kind, or that employ significantly improved technologies”
  - Projects that have the lowest levelized cost either of generated or stored energy, or measured reduction in energy consumption of greenhouse gas emissions

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DOE funding opportunities

- Grant opportunities are released on an ad hoc basis
- Examples of current grant opportunities through the DOE:

Funding opportunity	Total $ amount	Deadline
Biomass: development of algal biofuels and advanced fungible biofuels through consortiums	$85 million	TBA
Biomass: expansion of infrastructure for ethanol blends	$8 million	TBA
Geothermal: Geothermal Technologies Program: ground-source heat pumps	$50 million	16 July 2009* 6 August 2009
Geothermal: enhanced geothermal systems component research and development/analysis	$56 million	17 July 2009
Geothermal: Geothermal Technologies Program: validation of innovative exploration technologies; geothermal energy production; geothermal data development, collection and maintenance	$170 million	22 July 2009
Geothermal: enhanced geothermal systems demonstrations	$90 million	30 July 2009
Hydropower: hydroelectric facility modernization	$32 million	22 July 2009* 20 August 2009
Solar: high-penetration solar deployment	$37.5 million	30 July 2009
Solar: solar market transformation	$37 million	30 July 2009
Wind: wind energy consortia between institutions of higher learning and industry	$24 million	7 July 2009* 29 July 2009
Wind: large wind turbine drivetrain testing facility	$45 million	6 August 2009

* Deadline for letter of intent only, not actual application deadline

DOE loan guarantee program

- DOE’s innovative Loan Guarantee Program (authorized under the Energy Policy Act of 2005)
  - DOE authorized to issue loan guarantees for projects that "avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued"
  - Authorized to offer more than $10 billion in loan guarantees
  - Originally set to expire on 30 September 2009
- DOE’s temporary Loan Guarantee Program (authorized under ARRA)
  - Extended program to 30 September 2011
  - Appropriated additional $6 billion for loan program
  - Defined eligible technologies for new loan guarantees, including renewable energy projects that generate electricity or thermal energy and facilities that manufacture related components, electric power transmission systems and innovative biofuels projects

State Energy Program overview

- ARRA appropriated $3.1 billion to the State Energy Program (SEP).
- Funds were distributed to states on a formula basis; each state administers its own unique program.
- The individual states’ programs must follow the goals established for the SEP:
  1. Increase energy efficiency to reduce energy costs and consumption for consumers, businesses and government.
  2. Reduce reliance on imported energy.
  3. Improve the reliability of electricity and fuel supply and the delivery of energy services.
  4. Reduce the impact of energy production and use on the environment.

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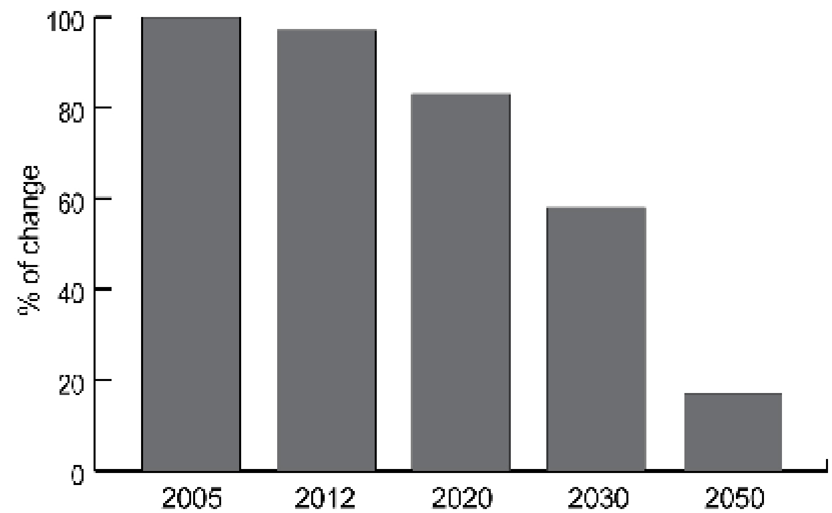
House narrowly passes Waxman-Markey climate and clean energy bill: 219–212 (26 June)

The American Clean Energy and Security Act of 2009 (HR 2454)

- Clean energy
  - National Renewable Electricity Standard (RES)
  - Carbon capture and sequestration
  - Clean transportation
  - Smart grid advancement
  - Transmission planning
- Transition to a clean energy economy
- Energy efficiency
  - Building energy efficiency
  - Lighting and appliances
  - Transportation
  - Industrial energy
- Global warming
  - Greenhouse gas emissions reduction
  - Cap-and-trade system for carbon emissions

HR 2454: emissions targets and allowances

- **Greenhouse gas emission reduction**
  - Economywide reduction goals
  - Capped emission sources
  - Base-year 2005 reduction
- **Emission allowances**
  - Banking of allowances
  - Borrowing allowances
  - Offsets
- **Disposition of allowances**
  - Increase federal revenues by roughly $873 billion
  - Increase spending by $864 billion



- Covered entities:
  - Electricity generators, refiners and others: 2012
  - Specified industrial sources: 2014
  - Local natural gas distributors: 2016

HR 2454: Renewable Electricity Standard

- Timeline for RES: "Required Annual Percentage"
  - 2012/2013 6.0%
  - 2014/2015 9.5%
  - 2016/2017 13.0%
  - 2018/2029 16.5%
  - 2020 to 2039 20.0%
- Can meet standard from electric efficiency (savings)
  - No more than 25% annually
  - State (governor) can request increase to 40% from efficiency
  - Savings determination
- Applies to retail electricity suppliers (4 million megawatt hours)
- **Renewable sources qualifying under bill's definition:** Wind, solar, geothermal, renewable biomass, biogas and biofuels derived exclusively from renewable biomass, qualified hydropower, marine/hydrokinetic renewables, landfill gas, wastewater treatment gas, coal mine methane

Questions from the audience

Questions and answers

Recap

One-minute recap

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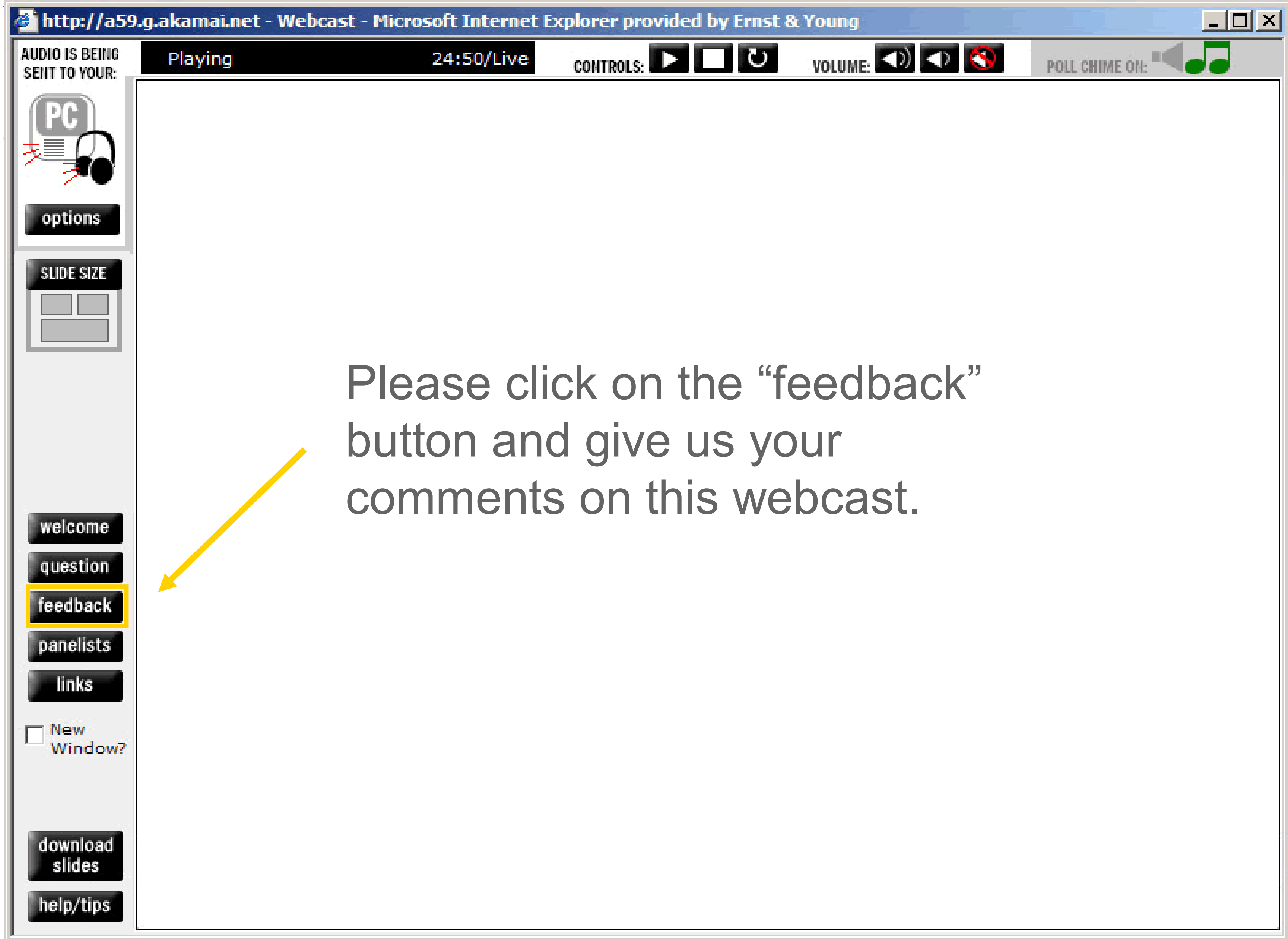

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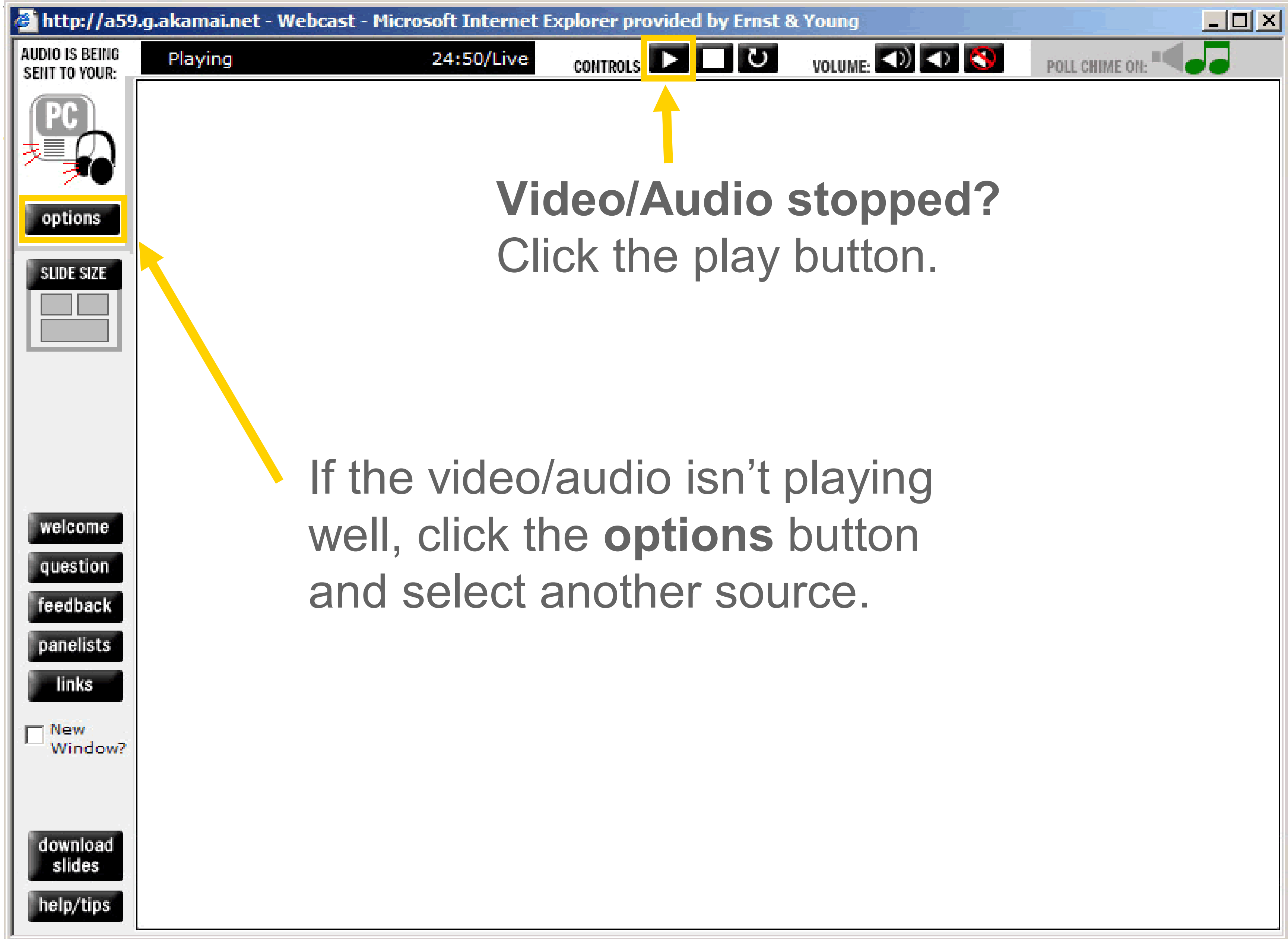

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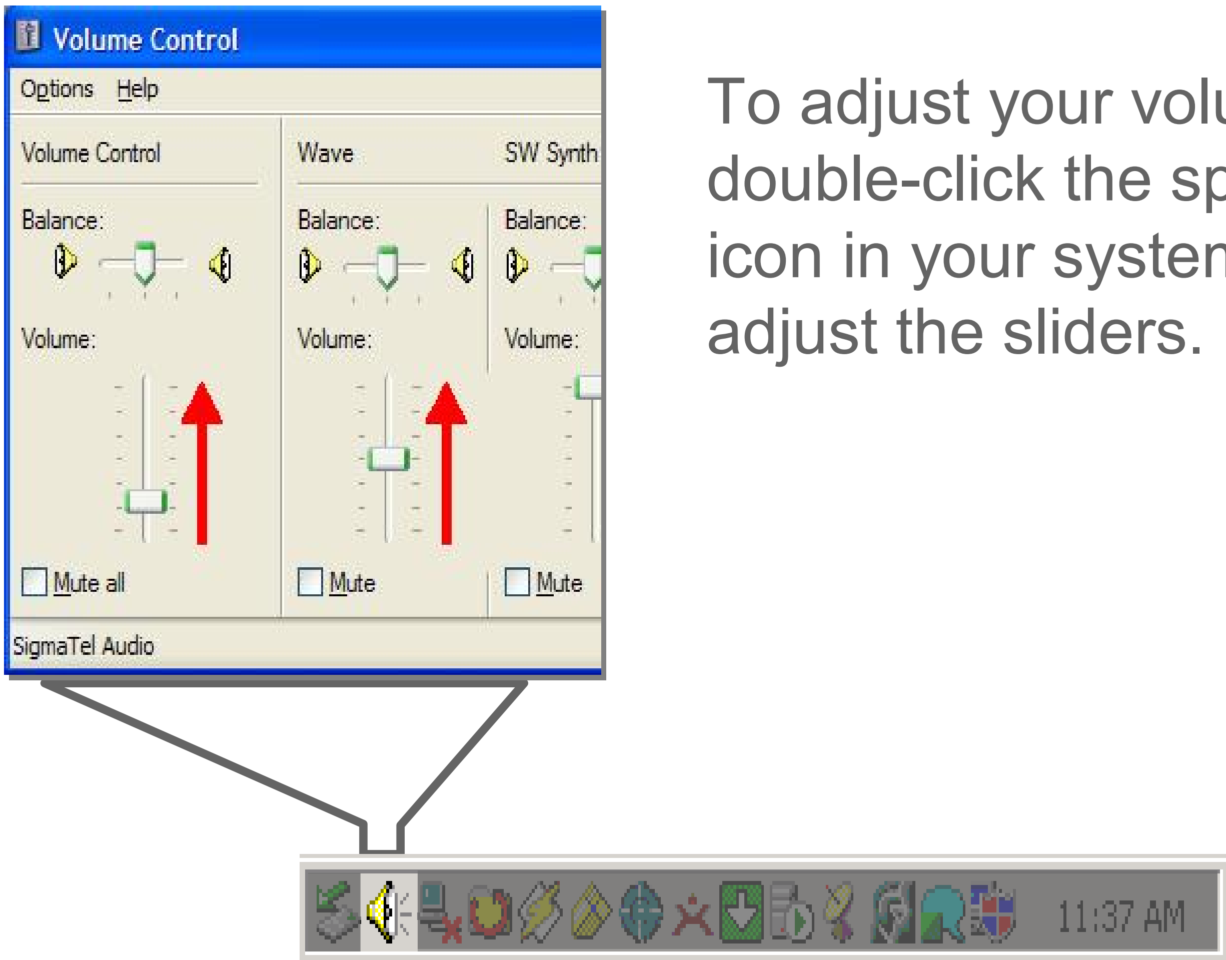

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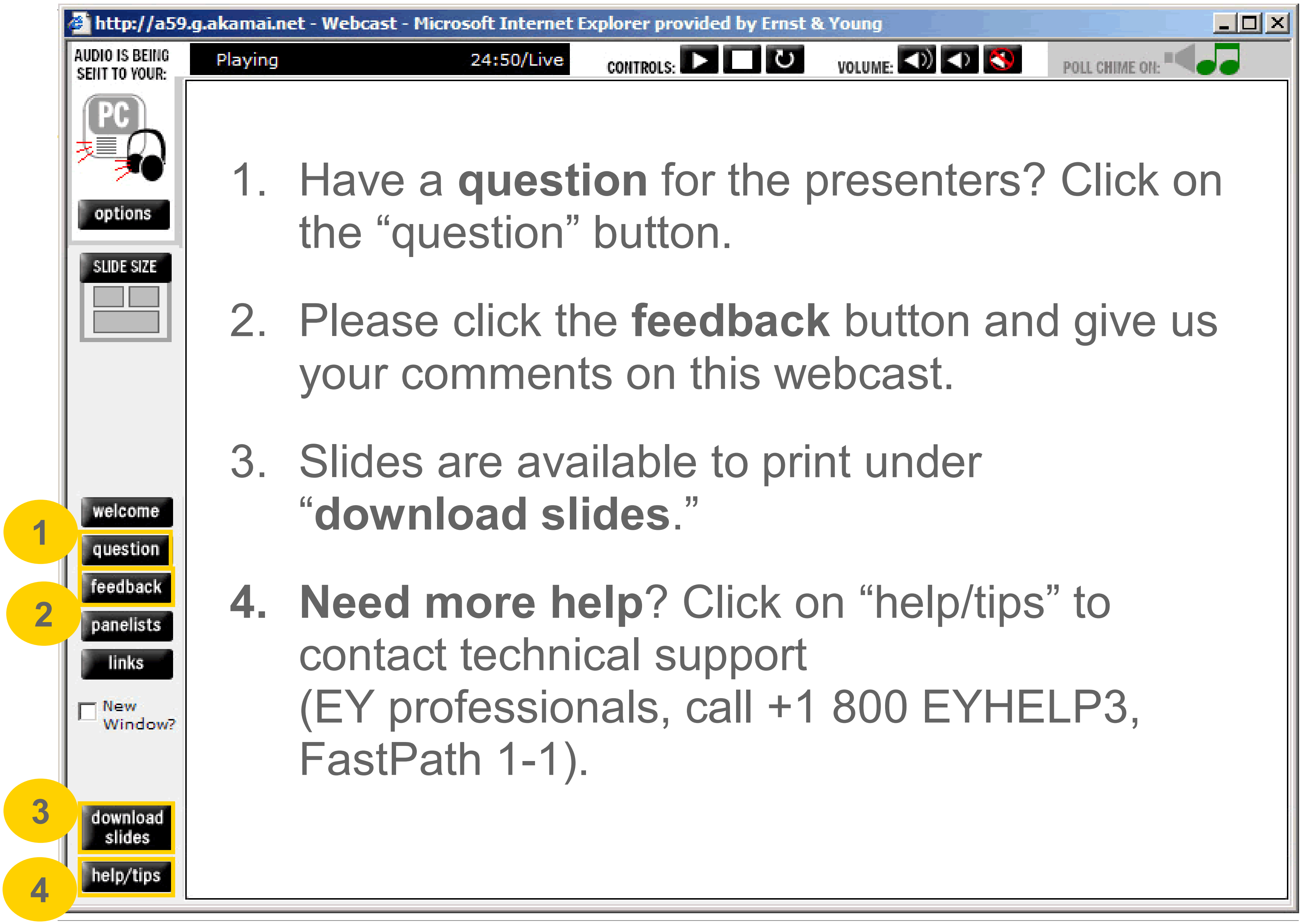

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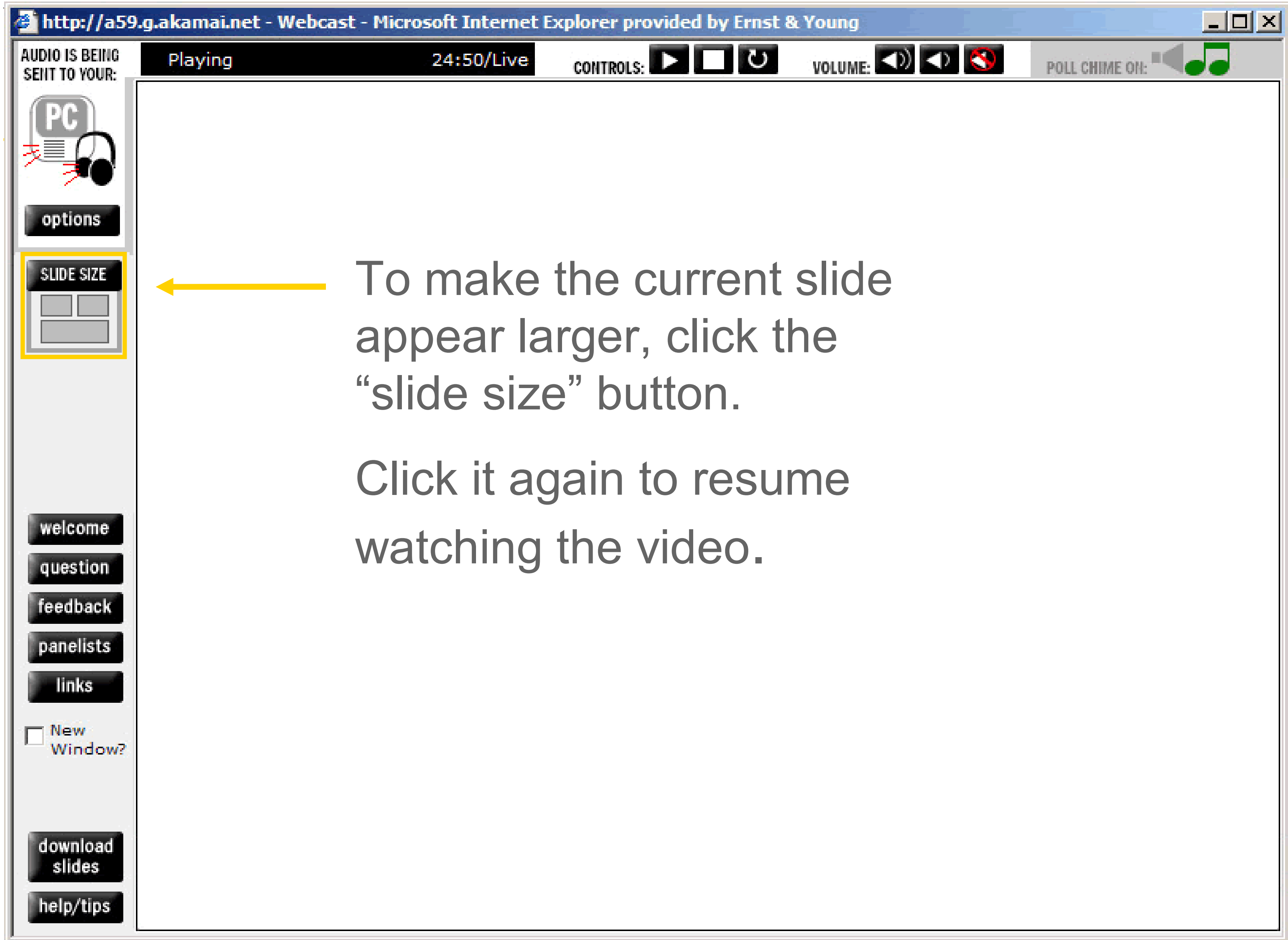
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