Laser Applications

• The changing face of laser applications demands advanced laser safety practices

• Simplified but broadly applicable

• Are our customers happy?
Content Agenda for Z136.1 - 2002

- New Classification Scheme
  - IEC harmonization (11 items)
- Medical Surveillance
- Tweak of Training
- Tweak of non-Beam Hazards
- Exposure Time Criteria for UV
- Update of Bioeffects (13 items)
- Control Measures (7 items)
- Other General Comments (13 items)
- Simplification- Flow Charts, Index, Case Studies (7 items)
Specify Laser Parameters

Extended Source? ($\alpha > \alpha_{\text{min}}$)

If exposure time > 0.7 sec, compute $T_2$.
Acquire MPE Equation from Table 5b

Compute $T_2$:
Acquire Thermal MPE Equation from Table 5b

Compute $C_E, C_B, C_A, C_C$
as necessary.
Compute Thermal MPE

400 nm < $\lambda$ < 600 nm?

YES

Acquire Photochemical MPE Equation from Table 5b
Apply Gamma Conditions

NO

Compute $C_A, C_B, C_C, C_P$
as necessary.
Compute Single-Pulse MPE

400 nm < $\lambda$ < 600 nm?

YES

Compute Thermal MPE

Convert MPE to Desired Units

NO

Compare Thermal to Photochemical MPE - Choose lowest MPE

Use Thermal MPE

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Forward to Subcommittees to Implement

• Each subcommittee shall
  – make sure their sub-committee list is up to date
  – hold a meeting where all members of their subcommittee have been invited for discussion of this agenda along with other subcommittee items (Note: if the meetings are usually held by phone or e-mail, having the subcommittee members send AZEC secretary an e-mail or phone call which communicates that they participated in the process should suffice to fulfill this requirement)
  – forward sign-in sheet to AZEC secretary for documentation
  – forwarded the notes from that meeting to the AZEC (notes should include any discussion of items which might affect quality, agenda or completeness of standard for evaluation of an updated agenda)

• Return Significant Input for Incorporation by December 2001
Z136.1 SPIR Form

2000 2001 2002 2003

★ Standard Published

★ Standard Document Submittal Form

← Vote of Subcommittee Draft ☺ and approval

General Membership Vote

AFRL/HEDO
Next Step

- SPIR Form
- Ballot of content agenda
- Subcommittee meetings and input