

NFRC

Research Proposal

NFRC SOLAR NON-PLANAR TASK GROUP

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CHARLIE CURCIJA & MICHAEL FISCHER, CO-CHAIRS



Presentation Preview

- ▶ Background
- ▶ Current NFRC Landscape
- ▶ NFRC Simulation
- ▶ NFRC Impacts and Benefits
- ▶ Project Budget
- ▶ Potential Co-Sponsors
- ▶ Why This Matters
- ▶ Questions



Background

- ▶ Non-Planar Products
 - ▶ Domed Skylights
- ▶ Market Drivers
 - ▶ Daylighting
 - ▶ Comfort
 - ▶ Energy Efficiency
- ▶ Prior NFRC Thermal Properties Research



NFRC Landscape Today

- ▶ No NFRC Simulation
- ▶ Individual Product Testing
 - ▶ Market Barrier for New product Configurations and Sizes
- ▶ Energy Code Compliance
 - ▶ Default Values
 - ▶ Punitive Energy Calculations



NFRC Simulation

- ▶ Modeling is Necessary to Facilitate Product Line Expansion
- ▶ Research to Support Modeling is Necessary to Support Simulation
 - ▶ NFRC Document Modifications
 - ▶ NFRC 100 Will Require Updating to Reflect Additional Simulation Options
 - ▶ Engagement With US DOE/EERE/BTO and Program Director to Facilitate Necessary Software Modifications for WINDOW/THERM
 - ▶ Assistance with Project Budgeting



NFRC Impacts and Benefits

- ▶ Increased Product Offerings
- ▶ NFRC Certification Program Growth
- ▶ Potential NFRC Membership Growth
- ▶ Expanded Presence in Non-Residential Applications



Budget

- ▶ Overall Project Estimate is \$250-300k
 - ▶ Additional Staff and Volunteer Time
 - ▶ Other Revenue Support
 - ▶ Manufacturers
 - ▶ Trade Associations
 - ▶ Grants
 - ▶ Project Would Likely Extent Through 2-3 Budget Years
 - ▶ Timeline Target is NFRC 2022 Standards Edition



Why Does This Matter?

- ▶ Status Quo Fosters a Market Disadvantage
 - ▶ Barrier to Market
- ▶ Testing Expense Limits Competition and Stifles Innovation
- ▶ The Project Will Fulfill Prior NFRC Research Investment



Questions and Discussion

THANK YOU FOR YOUR CONSIDERATION

