## 2-finger Ping Pong Classification

Chad Jones, Cisco Systems

## 2-Finger Ping Pong

- Two consecutive classification stages separated by a 'change class trigger'
- Suggest trigger is above classification voltage range
- Timing not yet defined, suggest second finger timing shorter than first
- Suggest first finger timing shorter than .3af


## Example Classification Decoder Table

## Six new steps

| Class | Power |
| :---: | :---: |
| 00 | 15.40 |
| 11 | 4.00 |
| 22 | 7.00 |
| 33 | 15.40 |
| 44 | 15.40 |
| 31 | 2.00 |
| 32 | 18.32 |
| 34 | 21.24 |
| 41 | 24.16 |
| 42 | 27.08 |
| 43 | 30.00 |$\quad$ These are the AF classes, unchanged

## How to calculate the Class Power

## Linear Steps Equation:

$$
13 W+\left(\left[\frac{P m a x-13 W}{5}\right) * n\right)
$$

Where $n=1,2,3,4,5$

Of course, Pmax will be defined by allowed current in cable

## Why not Robbins' codes?*

- I am concerned over false detection of legacy af PDs with ping pong scheme

AT PSE, AF PD (verbal example)

- Only three new classes above 15.4W
- Suggest not using class 1 or 2 as a ping pong 'precursor'


## Cisco Systems <br> 

