

*Avian Interactions with Powerlines*  
*New Mexico Avian Protection Conference*  
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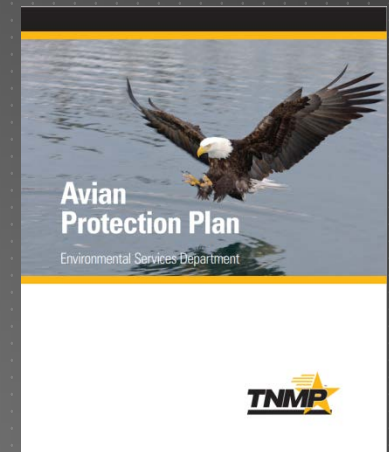
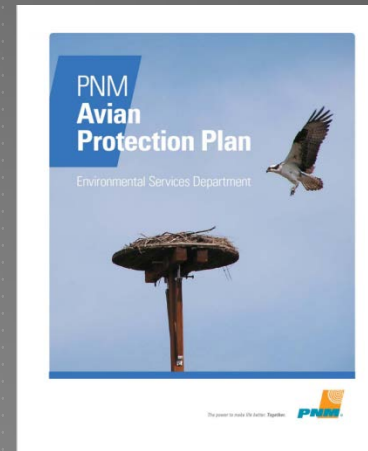
# APP Projects—The River and The Lines

# Introduction—Who is PNM Resources?

- ▶ PNM Resources is an IOU with transmission and distribution service territory in New Mexico and Texas
- ▶ Public Service Company of New Mexico (PNM) provides generation, transmission, and distribution in New Mexico
- ▶ Texas New Mexico Power Company (TNMP) provides transmission and distribution in Texas
- ▶ PNM Resources serves roughly 746,000 homes and businesses throughout NM and TX

# Introduction—Embracing APP principles

- ▶ Avian Protection Plans should focus on 12 key principles
- ▶ PNMR's APPs embrace and espouse these principles
- ▶ Two active projects focus on:
  - ▶ Avian Enhancements
  - ▶ Mortality Reduction Measures
  - ▶ Training
- ▶ Highlighted in Key Milestones section of APPs



# Project: Marking Transmission and Distribution Lines across the Rio Grande

- ▶ Mark all of PNM's distribution and transmission lines that cross the Rio Grande and Rio Chama rivers
- ▶ Different spacing, configuration, and device for distribution and transmission lines
- ▶ Work was capitalized
- ▶ Work done by helicopter



# Project: Marking Transmission and Distribution Lines across the Rio Grande

- ▶ The Rio Grande is critical to both the Pacific and Central flyway corridors
- ▶ Corridor supports over 200,000 waterfowl, tens of thousands of other bird species, and 157 bird species total (FWS, Division of Bird Habitat Conservation)
- ▶ Marking lines that cross this corridor is a good idea



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# Project: Marking Transmission and Distribution Lines across the Rio Grande

- ▶ Work could be capitalized (~\$200,000)
- ▶ Budget request process went smoothly
- ▶ Project aligns with use of a helicopter for other work





# Project: Marking Transmission and Distribution Lines across the Rio Grande

- ▶ A total of 11 transmission and 12 distribution line crossings
- ▶ Spiral bird flight diverters (BFDs) will be used on transmission static wires (staggered at 25 foot intervals)
- ▶ Bird “flapper” devices will be installed on distribution outer phases (staggered at 15 foot intervals—MAD constraints)
- ▶ 550 total “flappers” and 204 total BFDs

P&R Tech  
BirdMark BM-AG  
Bird Diverter

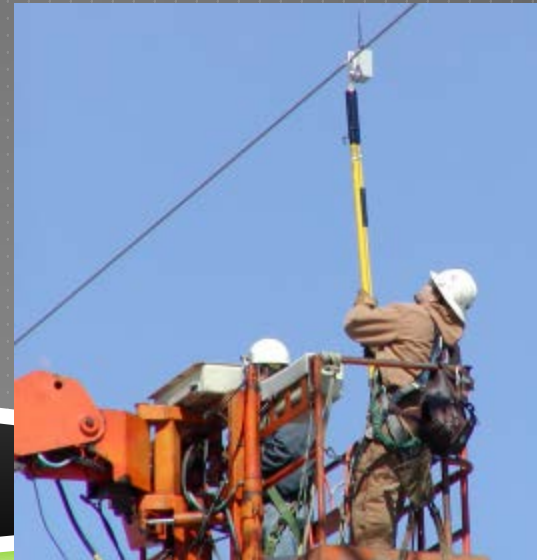


Preformed Line  
Products Bird  
Flight Diverter



# Project: Further analysis

- ▶ Install bird strike indicator(s)/sensor(s)
- ▶ Control/test powerline crossings to ascertain efficacy of markers
- ▶ Data could be used to aide further recommendations on spacing, usefulness, and design
- ▶ Resource for APLIC members, or other utilities
- ▶ EDM International





THANK YOU!! QUESTIONS??

