APPENDIX 3-F DETAILED CONSTRUCTION SCHEDULE AND VEHICLE TABLES

| Project Component No. & Activity | Sub-Phase and Activity | Approximate Duration (months) | Approximate Start Date |
|--|---|-------------------------------------|---------------------------|
| | Phase 1(a): Eastern Parcel Demolition | 1 | August 2018 |
| | Phase 1(b): Eastern Parcel Site Prep | 3 | September 2018 |
| Phase 1: Relocate 69/12kV | Phase 1(c): Substation Construction – Below Grade | 7 | December 2018 |
| portion of the Artesian Substation | Phase 1(d): Substation Construction – Above Grade | 6 | June 2019 |
| | Phase 1(e): Wiring and Relay Testing | 8 | April 2019 |
| | Phase 1(f): Substation Cutover & Energization (includes relocation of 12kV) | 2 | December 2019 |
| | Phase 2(a): Demo Old 69/12 kV Substation | 1 | February 2020 |
| | Phase 2(b): Western Parcel Site Prep | 2 | March 2020 |
| Phase 2: | Phase 2(c): Access Road and Retention Basin Construction | 2 | March 2020 |
| Construct new 230/69 kV portion of the Artesian Substation | Phase 2(d): Substation Construction – Below Grade | 3 | May 2020 |
| The stair Substation | Phase 2(e): Substation Construction – Above Grade | 4 | August 2020 |
| | Phase 2(f): Wiring and Relay Testing | 6 | July 2020 |
| | Phase 2(g): Substation Cutover & Energization | 1 | December 2020 |
| | Phase 3(a): Foundations | 1 | September 2018 |
| Phase 3: | Phase 3(b): Below Grade Construction (New duct installation) | 1 | September 2018 |
| Minor Modifications at Bernardo Substation | Phase 3(c): Above Grade Construction (Relays and Disconnects) | 1 | October 2018 |
| | Phase 3(d): Relay testing and Energization | 1 | November 2018 |

| Project Component No. & Activity | Sub-Phase and Activity | Approximate Duration (months) | Approximate Start Date |
|---|--|-------------------------------------|---------------------------|
| Phase 4: | Phase 4(a): Above Grade Construction (Shoo-fly, Relays and Disconnects) | 1 | November 2018 |
| Minor Modifications at Rancho Carmel Substation | Phase 4(b): Below Grade Construction (Upgrade/Replace Cable) – Same as Phase 8 below | 1 | December 2018 |
| | Phase 4(c): Relay Testing and Energization | 1 | January 2019 |
| Phase 5: | Phase 5(a): Construct Foundations | 2 | August 2020 |
| Install new 230kV Connection at | Phase 5(b): Pole Installation | 1 | October 2020 |
| Artesian (TL23051 & TL230XX) | Phase 5(c): Stringing and Conductor Installation | 1 | November 2020 |
| Phase 6: Construct new | Phase 6(a): Trenching and Duct Bank Installation | 2 | August 2019 |
| Underground Power Line Getaways at Artesian (TL616, TL6920, TL6939, TL6974) | Phase 6(b): Pulling and Conductor/ Cable Installation | 2 | October 2019 |
| Phase 7: Construct new Underground Power | Phase 7(a): Underground Trench/Conduit/Substructure | 2 | October 2019 |
| Line Getaways at Bernardo (TL6939, TL6974) | Phase 7(b): Cable/Conductor Pulling and Tensioning | 1 | December 2019 |
| Phase 8: Upgrade Getaway at Rancho Carmel | Phase 8(a): Pulling and Conductor/ Cable Installation – Same as Phase 4(b) above | 1 | December 2018 |
| Phase 9: | Phase 9(a): Trenching and Duct Bank Installation | 1 | January 2019 |
| Distribution Line Upgrades | Phase 9(b): Pulling and Conductor/ Cable Installation | 1 | February 2019 |

| Project Component No. & Activity | Sub-Phase and Activity | Approximate Duration (months) | Approximate Start Date |
|---|---|-------------------------------------|---------------------------|
| | Phase 10(a): Construct Pier Foundations | 3 | March 2019 |
| Phase 10: Pole Replacements | Phase 10(b): Direct Bury Structures and Foundation Pole Installations | 3 | June 2019 |
| and Reconductor Overhead 69kV Power Lines | Phase 10(c): Stringing and Conductor Installation | 2 | September 2019 |
| | Phase 10(d): Remove old structures | 1 | November 2019 |

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Detailed Equipment Table

| Project Phase | Activity & Approximate Duration ¹ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|--|-------------------------------------|--------------------------------|--|-------------------------|---|
| | | | Grader | Road construction and maintenance | 4 hrs | 1 |
| Staging Yard | 1 Month | 5 | Water Truck | Dust control | 3 hrs | 1 |
| Setup / Road Refresh | 1 Monin | 3 | Mower | Clear vegetation | 4 hrs | 1 |
| | | | Pickup Truck | Transport construction personnel | Travel only | 1 |
| | | 8 | 2-ton Flatbed Truck | Remove pole sections and hardware from site | 8 hrs x 20 days | 1 |
| Phone 1. Pulsante | Phase 1(a): | | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | 6 hrs x 20 days | 1 |
| Phase 1: Relocate 69/12kV Portion of the Artesian | Eastern Parcel Demo | | Excavator | Excavate soils/materials (trenching) | 6 hrs x 20 days | 1 |
| Substation | 1 Month | | Jackhammer | Break foundations | 6 hrs x 20 days | 2 |
| | | | Forklift | Transport materials at structure sites and staging yards | 6 hrs x 20 days | 2 |
| | | | Large Crane | Lift, position pole structures | 6 hrs x 20 days | 1 |

¹ Durations are not necessarily continuous.

| Project Phase | Activity & Approximate Duration ¹ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|-----------------------------------|--|-------------------------------------|--------------------------------------|---|-------------------------|---|
| | | | Bulldozer | Repair access roads / grade substation site | 8 hrs | 2 |
| | | | Road grader/Blade | Road construction, maintenance, and upgrading | 8 hrs | 2 |
| | | | Scraper | Site work | 8 hrs | 2 |
| Phase 1: Relocate 69/12kV Portion | Phase 1(b): Eastern Parcel | 14 | 834 Rubber Tire Compactor | Compact backfill within the trench | 8 hrs | 1 |
| of the Artesian | Site Prep | | Loader | Load spoil | 6 hrs | 1 |
| Substation | 3 Months | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | | | Water Truck | Dust control | 4 hrs | 1 |
| | | Excavator | Excavate soils/materials (trenching) | 6 hrs | 1 | |
| | | | Hauling Truck | Transport excavated materials | Tra | vel only |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|-----------------------------------|--|-------------------------------------|---|---|-------------------------|---|
| | | | Drilling rig/ Truck-mounted augur | Excavate for direct-bury and micropile poles and drill substation foundations | 8 hrs x 2 weeks | 1 |
| | | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | | | Fork Lift/Skid Steer Loader | Move equipment | 6 hrs | 1 |
| Phase 1: Relocate 69/12kV Portion | Phase 1(c): Substation | 12 | Small Mobile Crane (12-ton) | Load and unload materials | 2 hrs | 1 |
| of the Artesian Substation | Construction - Below Grade 7 Months | | Trencher/ Ditch Witch | Dig foundations/trenches | 8 hrs | 1 |
| | / Wionins | | Loader | Load spoil | 6 hrs | 1 |
| | | | Water Truck | Dust control | 2 hrs | 1 |
| | Co | Handheld Compactor | Compact trenches, etc. | 8 hrs | 1 | |
| | | Hauling Truck | Transport excavated materials | Trav | el only | |

 $^{^{\}rm 2}$ Durations are not necessarily continuous.

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|-----------------------------------|--|-------------------------------------|---|--|-------------------------|---|
| | | | Pickup Truck | Transport construction personnel | Travel time only | 4 |
| | | | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time only | 2 |
| | | | Aerial Bucket Truck/ Manlift | Access poles, string conductor, modify pole structure arms, and other various uses | 6 hrs | 2 |
| | | | Large Crane | Lift, position pole structures | 8 hrs x 7 days | 1 |
| Phase 1: Relocate 69/12kV Portion | Phase 1(d): Substation | ubstation | Boom Truck | Access poles and other height-restricted items | 6 hrs | 2 |
| of the Artesian Substation | Construction – Above Grade 6 Months | 18 | Fork Lift/Skid Steer Loader | Move equipment | 2 hrs | 2 |
| | o Months | | Line Truck | Assist with overhead conductor installation | Travel time only | 2 |
| | | | Cable reel trailers | Transport cable reels and feed cables into conduit | 8 hrs x 2 weeks | 1 |
| | | Stringing Rig (trailer) | String conductor | 6 hrs x 2 weeks | 1 | |
| | | SF6 gas cart (electric) | Process SF6 gas | 8 hrs x 10 days | 1 | |
| | | 100-hp Oil Processing Truck | Pump oil for transformers | 24 hrs x 6 days | 1 | |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|--|-------------------------------------|---|--|-------------------------|---|
| | Phase 1(e): Wiring and Relay Testing | 5 | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 2 |
| | 8 Months | | Wire Truck | Hold spools of wire | Travel only | 1 |
| | | bstation tover & 8 ergization | Line Truck | Assist with overhead conductor installation | 2 hrs | 2 |
| Phase 1: Relocate 69/12kV Portion of the Artesian | Phase 1(f): | | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 3 |
| Cu Er | Cutover & Energization 2 Months | | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | Travel only | 1 |
| | | | Engineer's Pickup | Transport personnel | Travel only | 1 |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|--------------------------------|--|-------------------------------------|--|--|-------------------------|---|
| | | | 2-ton Flatbed Truck | Remove pole sections and hardware from site | 4 hrs | 1 |
| | | | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | 6 hrs | 1 |
| Phase 2: | <u>Phase 2(a):</u> | 12 | Excavator | Excavate soils/materials (trenching) | 8 hrs x 1 week | 1 |
| Construct New 230/69kV Portion | Demo Old 69/12-kV | | Jackhammer | Break foundations | 8 hrs x 1 week | 2 |
| of Artesian Substation | Substation 1 Month | | Forklift | Transport materials at structure sites and staging yards | 4 hrs | 2 |
| | | Large Crane | Lift, position pole structures | 8 hrs x 1 week | 1 | |
| | | Line truck | Assist with overhead conductor installation | Travel time | 2 | |
| | | Boom Truck | Access poles and other height-restricted items | 6 hrs | 1 | |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|--|-------------------------------------|------------------------------|--------------------------------------|-------------------------|---|
| | | | Bulldozer | Grade substation site | 8 hrs | 1 |
| | | | Road grader/Blade | Road construction | 8 hrs | 1 |
| | | | Scraper | Site work | 8 hrs | 1 |
| Phase 2: Construct New | Phase 2(b): | | 834 Rubber Tire Compactor | Compact backfill within the trench | 8 hrs | 1 |
| 230/69kV Portion | Western Parcel Site Prep | 14 | Loader | Load spoil | 6 hrs | 1 |
| of Artesian Substation | 2 Months | | Backhoe | Excavate trenches | 6 hrs | 1 |
| S42854472512 | | | Water Truck | Dust control | 4 hrs | 1 |
| | | | Excavator | Excavate soils/materials (trenching) | 6 hrs | 1 |
| | | | Hauling Truck | Transport excavated materials | Trav | rel only |
| | | | Bulldozer | Grade substation site | 8 hrs | 1 |
| | | | Road grader/Blade | Road construction | 8 hrs | 1 |
| Dhaga 2. | Phase 2(c): | | Scraper | Site work | 8 hrs | 1 |
| 230/69kV Portion of Artesian Substation | Access Road and Retention Basin | 14 | 834 Rubber Tire Compactor | Compact backfill within the trench | 8 hrs | 1 |
| | Construction | | Loader | Load spoil | 6 hrs | 1 |
| | 2 Months | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | | | Water Truck | Dust control | 4 hrs | 1 |
| | | | Excavator | Excavate soils/materials (trenching) | 6 hrs | 1 |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|--|-------------------------------------|---|---|-------------------------|---|
| | | | Drilling rig/ Truck-mounted augur | Excavate for direct-bury and micropile poles and drill substation foundations | 8 hrs x 2 weeks | 1 |
| | | | Backhoe | Excavate trenches | 3 hrs | 1 |
| | | | Fork Lift/Skid Steer Loader | Move equipment | 6 hrs | 1 |
| Phase 2: Construct New | Phase 2(d): Substation | | Small Mobile Crane (12-ton) | Load and unload materials | 1 hr | 1 |
| 230/69kV Portion of Artesian Substation | Construction – Below Grade 3 Months | 10 | Trencher/Ditch Witch | Dig foundations/trenches | 8 hrs | 1 |
| S42854412511 | 3 Wionins | | Loader | Load spoil | 6 hrs | 1 |
| | | | Water Truck | Dust control | 2 hrs | 1 |
| | | Handheld Compactor | Compact trenches, etc. | 8 hrs | 1 | |
| | | | Hauling Truck | Transport excavated materials | Trav | rel only |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|--|-------------------------------------|---|--|-------------------------|---|
| | | | Pickup Truck | Transport construction personnel | Travel time | 4 |
| | | | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 2 |
| | | | Aerial Bucket Truck/ Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | 8 hrs | 2 |
| | Dhana 2(a). | onstruction – 18 bove Ground | Large Crane | Lift, position pole structures | 8 hrs x 12 days | 1 |
| Phase 2: Construct New 230/69kV Portion | Substation Construction – | | Boom Truck | Access poles and other height-restricted items | 8 hrs | 2 |
| of Artesian Substation | Above Ground 4 Months | | Fork Lift/Skid Steer Loader | Move equipment | 2 hrs | 2 |
| | | | Line Truck | Assist with overhead conductor installation | Travel time | 2 |
| | | | Cable reel trailers | Transport cable reels and feed cables into conduit | 6 hrs x 3 weeks | 1 |
| | | Stringing Rig (trailer) | String conductor | 6 hrs x 10 days | 1 | |
| | | SF6 gas cart (electric) | Process SF6 gas | 8 hrs x 5 days | 1 | |
| | | 100-hp Oil Processing Truck | Pump transformer oil | 24hrs x 4 days | 1 | |

Detailed Equipment Table

| Appendix 3-I |
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| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---------------------------------|---|-------------------------------------|---|---|-------------------------|---|
| Phase 2: Construct New | Phase 2(f): Wiring and Relay Testing 6 Months | 5 | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 2 |
| 230/69kV Portion of Artesian | Phase 2(g): Substation | | Line Truck/ bucket truck | Assist with overhead conductor installation | 2 hrs | 3 |
| Substation | Cutover & Energization <i>I Month</i> | 8 | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 3 |
| Phase 3: Minor Modifications at | Phase 3(a): | | Crew/ Equipment Truck | Support construction & transport personnel | Travel time | 2 |
| Bernardo Substation | Foundations 1 Month | 6 | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 1 |

| Project Phase | Activity & Approximate Duration ² | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|--|--|-------------------------------------|---|---|-------------------------|---|
| | | | Water truck | Dust control | 2 hrs | 1 |
| | Phase 3(b): | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | Below Grade Construction (New duct | 4 | Hauling Truck | Transport excavated materials | Trav | vel only |
| | installation) 1 Month | | Bobcat | Move soil and materials | 8 hrs | 1 |
| Phase 3: Minor Modifications at Bernardo | Phase 3(c): Above Grade | | Crew/ Equipment Truck | Support construction & transport personnel | Travel time | 2 |
| Substation | Construction (Relays and Disconnects) 1 Month | 4 | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 1 |
| | Phase 3(d): Relay Testing and Energization 1 Month | 5 | Relay, crew, & start engineer | Energize and final test of relays and equipment | Travel time | 3 |

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|--|---|-------------------------------------|---|--|-------------------------|---|
| | | | Crew/ Equipment Truck | Support construction & transport personnel | Travel time | 4 |
| | Phase 4(a): Above Grade Construction | | Relay/ Telecommunicat ion/ Wiring Van | Test relay and telecommunications devices | Travel time | 1 |
| | (Shoo-fly, Relays and Disconnects) 1 Month | 8 | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | Travel time | 1 |
| Phase 4: Minor Modification at Rancho Carmel | | | Line Truck | Assist with overhead conductor installation | Travel time | 1 |
| Substation | Phase 4(b): Below Grade Construction (Upgrade/ Replace Cable) - Same as Phase 8(a) below 1 Month | | | See Phase 8(a) below | | |
| | Phase 4(c): Relay Testing and Energization <i>I Month</i> | 5 | Relay, crew, & start engineer | Energize and final test of relays and equipment | Travel time | 3 |

 $^{^{\}rm 3}$ Durations are not necessarily continuous.

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|--|---|-------------------------------------|--------------------------------|--|-------------------------|---|
| | | | Water Truck | Dust control | 2 hrs x 6 days | 1 |
| | | | Tractor/Trailer Unit | Transport materials at structure sites and staging yards | 4 hrs x 2 days | 1 |
| | Phase 5(b): Pole Installation 1 Month | 4 | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | 7 hrs x 6 days | 1 |
| | | | Crew/Equipmen t Truck | Support construction & transport personnel | Travel only | 2 |
| Phase 5: Install New 230kV Connection at | | | Crane | Lift, position pole structures | 5 hrs x 6 days | 1 |
| Artesian | | | Water Trucks | Dust control | 4 hrs | 2 |
| (TL23051 & TL230XX) | | | Wire Truck | Hold spools of wire | 4 hrs | 1 |
| 11230222) | | | Pulling Rig | Pull conductor | 6 hrs | 1 |
| | Phase 5(c): | | Boom Truck | Access poles and other height-restricted items | 5 hrs | 2 |
| | Stringing and Conductor Installation 1 Month | 5 | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | 5 hrs | 2 |
| | | | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|--|--|-------------------------------------|-----------------------------|--|-------------------------|---|
| | | | Sawcutter | Pavement Cutting | 6 hrs | 1 |
| | | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | | | Crane | Set vaults | 4 hrs | 1 |
| | Phase 6(a): Trenching and | 12 | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |
| Phase 6: Construct New Underground | Duct Bank Installation 2 Months | | Concrete truck | Transport and process concrete | 1 hrs | 1 |
| Power Line | 2 1/20111115 | | Paver | Re-pave Asphalt | 5 hrs | 1 |
| Getaways at Artesian (TL616, TL6920, | | | Hauling Truck | Transport excavated materials | Travel only | |
| TL6939, TL6974) | | | Water Truck | Dust control | 3 hrs | 1 |
| | Phase 6(b): | | Puller & Tensioner | Pull new/old cable/conductor | 5 hrs | 1 |
| | Pulling and Conductor/Cable | 4 | Reel Trailer | Feed new cable/conductor | 3 hrs | 1 |
| | Installation 2 Months | · | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|---|-------------------------------------|-----------------------------|--|-------------------------|---|
| | | | Sawcutter | Pavement Cutting | 6 hrs | 1 |
| | | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | <u>Phase 7(a):</u> | | Crane | Set vaults | 3 hrs | 1 |
| Phase 7: Construct New | Underground Trench/ Conduit/Substru | 12 | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |
| Underground Power Line | cture 2 Months | | Concrete truck | Transport and process concrete | 1 hrs | 1 |
| Getaways at Bernardo | | | Paver | Re-pave Asphalt | 5 hrs | 1 |
| (TL6939, TL6974) | | | Water Truck | Dust control | 3 hrs | 1 |
| | Phase 7(b): Cable/Conductor | | Puller & Tensioner | Pull new/old cable/conductor | 6 hrs | 1 |
| | Pulling and | 4 | Reel Trailer | Feed new cable/conductor | 4 hrs | 1 |
| | Tensioning 1 Month | | Crew/Equipmen t Truck | Support construction & transport personnel | Travel only | 2 |
| DI O.K. I | Phase 8(a): Pulling and | | Puller & Tensioner | Pull new/old cable/conductor | 5 hrs | 1 |
| Phase 8: Upgrade Getaway at Rancho Carmel | Conductor/Cable Installation (same as Phase | 4 | Reel Trailer | Feed new cable/conductor | 5 hrs | 1 |
| Nancho Carmer | 4(b) above) 1 Month | | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|-------------------------------------|--|-------------------------------------|-----------------------------|--|-------------------------|---|
| | | | Backhoe | Excavate trenches | 6 hrs | 1 |
| | Phase 9(a): | 10 | Bobcat | Move soil and place materials | 6 hrs | 1 |
| | Trenching and | | Water truck | Dust control | 4 hrs | 1 |
| | Duct Bank Installation 1 Month | | Hauling Truck | Transport excavated materials | Travel only | |
| Phase 9: Distribution Line Upgrades | 1 Month | | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |
| | Phase 9(b): Pulling and | | Puller & Tensioner | Pull new/old cable/conductor | 6 hrs | 1 |
| | Conductor/ | 4 | Reel Trailer | Feed new cable/conductor | 6 hrs | 1 |
| | Cable Installation I Month | , | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |

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| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|----------------------------------|--|-------------------------------------|---|---|-------------------------|---|
| | | | Water Truck | Dust control | 4 hrs | 2 |
| | | | Drilling rig/ Truck-mounted augur | Excavate for direct-bury and micropile poles and drill substation foundations | 6 hrs | 2 |
| Phase 10: | Dhasa 10(a). | | Air Compressor | Operate air tools | 3 hrs | 1 |
| Pole Replacement and Reconductor | Phase 10(a): Construct Pier Foundations | 4 | Boom Truck | Access poles and other height-restricted items | 5 hrs | 2 |
| Overhead 69kV Power Lines | 3 Months | | Pickup Truck | Transport construction personnel | Travel only | 2 |
| | | | Concrete Truck | Transport and process concrete | 1 hrs | 5 |
| | | | Portable generators | Operate power tools | 2 hrs | 2 |

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|---|---|-------------------------------------|--------------------------------|--|-------------------------|---|
| | | | Water Truck | Dust control | 4 hrs | 2 |
| | | | Tractor/Trailer Unit | Transport materials at structure sites and staging yards | 3 hrs | 1 |
| | Dhasa 10(h). | | Auger | Hole drilling | 6 hrs | 1 |
| | Phase 10(b): Direct Bury Structures and Foundation Pole | V V | Crew/ Equipment Truck | Support construction & transport personnel | 5 hrs | 1 |
| Phase 10: | Installations 3 Months | | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, and other various uses | 6 hrs | 3 |
| Pole Replacement | | | Crane | Pole setting | 5 hrs | 1 |
| and Reconductor Overhead 69kV Power Lines | | | Pickup Truck | Transport construction personnel | Travel only | 3 |
| | | | Water Trucks | Dust control | 4 hrs | 2 |
| | | | Wire Truck | Hold spools of wire | 6 hrs | 1 |
| | | | Pulling Rig | Pull conductor | 6 hrs | 1 |
| | Phase 10(c): Stringing and | 5 | Boom Truck | Access poles and other height-restricted items | 6 hrs | 2 |
| | Conductor Installation 2 Months | 5 | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, and other various uses | 6 hrs | 2 |
| | | | Crew/Equipmen t Truck | Support construction & transport personnel | Travel only | 2 |

| opendix 3- |
|------------|
| 3-F |

| Project Phase | Activity & Approximate Duration ³ | Approximate Number of Workers | Equipment Type | Equipment Use | Equipment Usage Rate | Approximate Quantity of Equipment |
|--|--|-------------------------------------|--------------------------------|--|-------------------------|---|
| Phase 10: Pole Replacement and Reconductor Overhead 69kV Power Lines | Phase 10(d): Remove Old Structures 1 Month | 10 | Boom Truck | Access poles and other height-restricted items | 8 hrs | 2 |
| | | | Aerial Bucket Truck/Manlift | Access poles, string conductor, modify pole structure arms, provide guard structures, and other various uses | 8 hrs | 2 |
| | | | Crew/ Equipment Truck | Support construction & transport personnel | Travel only | 2 |
| Demobilization / Cleanup / Road Refreshing | 1 Month | 5 | Grader | Road construction and maintenance | 2 hrs | 1 |
| | | | Water Truck | Dust control | 2 hrs | 1 |
| | | | Pickup Truck | Transport construction personnel | Travel only | 1 |

SDG&E 230-kV Artesian Substation Expansion Project Detailed Construction Schedule

