

Memorandum

Re:	Decision on the ISO 2014-15 transmission plan	
Date:	March 19, 2015	
From:	Keith Casey, Vice President, Market & Infrastructure Development	
То:	ISO Board of Governors	

This memorandum requires Board action.

EXECUTIVE SUMMARY

Each year the California Independent System Operator Corporation undertakes a comprehensive assessment of the transmission needs of the system over a 10-year planning horizon and produces an annual transmission plan. The ISO 2014-2015 transmission plan provides a comprehensive evaluation of the ISO transmission grid to identify upgrades needed to successfully meet California's policy goals, in addition to examining conventional grid reliability requirements and transmission projects that can bring economic benefits to consumers. The tariff requires Board approval of the transmission plan. Accordingly, Management recommends the Board approve the ISO transmission plan for the 2014-2015 planning cycle.

Due to the considerable progress made in previous planning cycles in identifying and approving a wide array of transmission projects, the number and capital costs of recommended transmission projects in this 2014-2015 transmission plan is considerably reduced from previous years. While considerable focus in recent transmission plans has been on ensuring the transmission system supports the state's 33% renewables portfolio standard and the reliability needs in southern California – the LA Basin and San Diego areas – this year's plan has focused instead on assessing the progress of previously approved transmission plans and state resource procurement activities to ensure those needs are on track to being met. The ISO's analysis in this planning cycle indicated that the authorized resources, forecast load, and previously-approved transmission projects working together meet the reliability needs in the LA Basin and San Diego areas. However, due to the inherent uncertainty in the significant volume of preferred resources and other conventional mitigations, the ISO has performed extensive analysis of transmission alternatives in the event other resources fail to materialize.

The ISO's transmission planning process focuses on developing solutions to needs identified to meet reliability, policy or economic requirements. Those solutions can encompass a broad range of conventional and non-conventional solutions. This year's transmission planning efforts have again put significant effort on enabling solutions that minimize overall emissions, especially in addressing the reliability needs for southern California. Another major focus in this planning cycle was the comprehensive analysis of reliability needs on the San Francisco Peninsula, concluding studies that have been ongoing for several planning cycles.

In addition to the approval of the overall findings and conclusions documented in the transmission plan, and summarized in this memorandum, Management requests that the Board approve the following transmission upgrades set forth in the transmission plan:

- A total of seven reliability-driven transmission projects were identified as needed to ensure compliance with NERC and ISO planning standards, representing an investment of approximately \$352 million in infrastructure additions to the ISOcontrolled grid. Two of the seven reliability-driven projects each having costs greater than \$50 million and a combined cost of approximately \$254 million are recommended for approval. The remaining five projects cost less than \$50 million each, totaling \$98 million, and were approved by Management consistent with the tariff.
- No policy-driven transmission projects were identified as needed for meeting state policy needs associated with 33% RPS objectives.
- One economically-driven transmission project totaling approximately \$7 million is recommended for approval.

The transmission plan also identified one project proposal that will require further study, and may result in Management seeking additional Board approvals of certain amendments to the 2014-2015 transmission plan at a future meeting. The proposal is to loop an existing 230 kV generation tie - the Buck-Julian Hinds 230 kV transmission line - into the Colorado River substation in the Blythe area.

The 2014-2015 transmission plan also included studies on the transmission needs for increased renewable generation in the Imperial Valley area. The studies led to the identification of an operational solution that, coupled with previously approved transmission reinforcements, restores the deliverability of future renewable generation from the Imperial Valley area to the levels that were supported before the early retirement of the San Onofre Nuclear Generating Station (SONGS). The early retirement of SONGS had materially changed flow patterns in the area, resulting in a significant decline in forecast deliverability from the Imperial area as set out in the 2013-

2014 Transmission Plan. These new measures, in combination with previously approved transmission projects is projected to provide over 1700 MW of incremental transmission deliverability for the Imperial area. As approximately 1200 MW of new renewable generation interconnecting to either the ISO or IID in the Imperial area is already moving forward, there is sufficient transmission deliverability projected to support at least an additional 500 to 750 MW of renewable resources, depending on the precise resource locations within the Imperial area. Through study of an even higher level of renewable generation in the Imperial area and a stakeholder consultation effort, the ISO has also received considerable input on additional options that could be explored in the event additional renewable generation is called for in the Imperial area.

Further, in response to changing material circumstances and updated information provided by Pacific Gas and Electric, the continued need for the final phase of the Santa Cruz 115 kV Reinforcement Project which was approved in the 2009-2010 planning cycle was reviewed. This review subsequently led to the cancellation of the remaining phase of the project by Management as the project was less than \$50 million and originally approved by Management.

None of the transmission projects in this transmission plan include facilities eligible for competitive solicitation.

The ISO produced this transmission plan after engaging in an extensive stakeholder process. We communicated preliminary results through stakeholder presentations on September 24 and 25, and on November 19 and 20, 2014. The ISO released a draft plan on February 2, 2015 and presented it at a stakeholder session on February 17, 2015. Based on comments received from stakeholders, we conducted additional review and made further revisions, culminating in the revised draft ISO 2014-2015 transmission plan. Management proposes the following motion:

Moved, that the ISO Board of Governors approves the ISO 2014-2015 transmission plan attached to this memorandum dated March 19, 2015.

The revised transmission planning process

A core responsibility of the ISO is to plan and approve additions and upgrades to transmission infrastructure so that as conditions and requirements evolve over time, it can continue to provide a well-functioning wholesale power market through reliable, safe and efficient electric transmission service. Since it began operation in 1998, the ISO has fulfilled this responsibility through its annual transmission planning process.

Under the transmission planning process, Board approval of the transmission plan is required. Specifically, section 24.4.10 of the tariff states:

The revised draft comprehensive Transmission Plan, along with the stakeholder comments, will be presented to the CAISO Governing Board for consideration and approval. Upon approval of the plan, all needed transmission addition and upgrade projects and elements, net of all transmission and non-transmission alternatives considered in developing the comprehensive Transmission Plan, will be deemed approved by the CAISO Governing Board. Transmission upgrade and addition projects with capital costs of \$50 million or less can be approved by CAISO management and may proceed to permitting and construction prior to Governing Board approval of the plan. Following Governing Board approval, the CAISO will post the final comprehensive Transmission Plan to the CAISO website.

Collaborative planning efforts

The ISO, utilities, the California Energy Commission, the California Public Utilities Commission and other stakeholders worked closely to assess how to meet the environmental goals established by state policy.

The development of the unified planning assumptions for this planning cycle benefited from further improvements in coordination efforts between the CPUC, the CEC and the ISO. Building from previous collaboration efforts focused on a single "managed" load forecast, staff undertook an inter-agency process alignment forum to improve infrastructure planning coordination within the three core processes:

- Long-term forecast of energy demand produced by the CEC as part of its biennial Integrated Energy Policy Report (IEPR),
- Biennial Long Term Procurement Plan proceeding (LTPP) conducted by the CPUC, and
- Annual Transmission Planning Process (TPP) performed by the ISO.

The agencies also agreed on an annual process to be performed in the fall of each year to develop planning assumptions and scenarios to be used in infrastructure planning activities in the coming year. The assumptions include demand, supply and system infrastructure elements, including the renewables portfolio standard (RPS) portfolios discussed in more detail below. The results of the CPUC's annual process feeding into

this 2014-2015 transmission planning process were communicated via an assigned commissioner's ruling in the 2014 LTPP¹.

These assumptions were further vetted by stakeholders through the stakeholder process in developing the 2014-2015 study plan.

Findings and transmission projects

Our comprehensive evaluation of the areas listed above is discussed in the following sections.

RELIABILITY DRIVEN TRANSMISSION PROJECTS

A total of seven reliability-driven transmission projects were identified as needed to ensure compliance with NERC and ISO planning standards, representing an investment of approximately \$352 million in infrastructure additions to the ISO-controlled grid. Two of the seven projects having costs greater than \$50 million each and a combined cost of approximately \$254 million are recommended for approval. The remaining five of these projects cost less than \$50 million each, totaling \$98 million, and were approved by Management consistent with the tariff. These reliability projects are necessary to ensure compliance with the NERC and ISO planning standards. The two reliability-driven transmission projects with costs greater than \$50 million consist of the following:

- North East Kern 70 to 115 kV voltage conversion Converting two existing 70 kV circuits in the area to 115 kV, reconductoring an existing 115 kV line with larger conductor, and upgrading an existing substation to breaker-and-ahalf configuration.
- *Martin 230 kV bus extension project* Reconfiguring the existing 230 kV transmission terminating at Martin to provide one 230 kV path bypassing the Martin substation.

A summary of the number of reliability-driven transmission projects and associated total costs in each of the three major transmission owners' service territories is listed below in Table 1.

In arriving at these projects, the ISO and transmission owners performed power system studies to measure system performance against the NERC reliability standards and ISO planning standards as well as to identify reliability concerns that

¹ Rulemaking 13-12-010 "Assigned Commissioner's Ruling Technical Updates to Planning Assumptions and Scenarios for Use in the 2014 Long-Term Procurement Plan and 2014-2015 CAISO TPP" on February 27, 2014, with a technical update adopted on May 14, 2014.

included, among other things, facility overloads and voltage excursions. The ISO then evaluated mitigation measures and identified cost-effective solutions.

Service Territory	Number of Projects	Cost (in millions)
Pacific Gas & Electric (PG&E)	2	\$254
Southern California Edison Co. (SCE)	1	\$5
San Diego Gas & Electric Co. (SDG&E)	4	\$93
Valley Electric Association (VEA)	0	0
Total	7	\$352

Table 1 – Summary of Needed Reliability-Driven Transmission Projects in the ISO 2014-2015 Transmission Plan

The majority of identified reliability concerns are related to facility overloads or low voltage. Therefore, many of the specific projects that comprise the totals in Table 1 include line reconductoring and facility upgrades for relieving overloading concerns, as well as installing voltage support devices for mitigating voltage concerns.

San Francisco Peninsula

One service area, the San Francisco Peninsula, was identified in previous planning cycles by PG&E as being particularly vulnerable to lengthy outages in the event of extreme (NERC Category D) contingencies, and further research was undertaken in this planning cycle to determine the need and options for reinforcement. This analysis continued on from the analysis commenced in the 2013-2014 planning cycle. The study ultimately concluded that while an additional supply to the peninsula would not materially impact reliability of supply or service restoration times on the Peninsula, further reinforcement of the existing system on the peninsula is necessary to address potential seismic or third party action risks. One component of the reinforcement, the Martin 230 kV bus extension project requires ISO approval. The other components are more appropriately classified as capital maintenance, and are being undertaken by PG&E with the support of the ISO.

Southern California reliability assessment (LA Basin and San Diego)

A major reliability focus of past transmission planning efforts has been the reliability needs in southern California – the LA Basin and San Diego area in particular – in light of the retirement of the SONGS generation coupled with the impacts of potential retirement of gas-fired generation in the San Diego and LA Basin areas.

The ISO's analysis indicated in this planning cycle that the authorized resources, forecast load, and previously-approved transmission projects working together meet the reliability needs in the LA Basin and San Diego areas.

However, due to the inherent uncertainty in the significant volume of preferred resources and other conventional mitigations, the ISO has performed extensive analysis of transmission alternatives in the event other resources fail to materialize and transmission alternatives are called upon to address a shortfall.

Several alternatives have been identified that could address a potential shortfall in other resources. These alternatives involve challenging rights of way and lengthy permitting and construction timelines. If currently anticipated resources fail to materialize, other short term mitigation plans will need to be considered to provide adequate time for transmission alternatives to be developed. Continued analysis will be required as needs evolve in future planning cycles.

Advancing preferred resources

Building on efforts in past planning cycles, the ISO is continuing to make material strides in facilitating use of preferred resources to meet local transmission system needs.

Efforts in the 2014-2015 planning cycle were focused on testing the preferred resources provided by the utility procurement processes, particularly in the LA Basin and San Diego areas. These efforts built upon the methodologies initially developed by the ISO and discussed in a methodology paper² released on September 4, 2013, as part of the 2013-2014 transmission planning cycle in support California's policy emphasis on the use of preferred resources³ — energy efficiency, demand response, renewable generating resources and energy storage. These methods considered how such resources can constitute non-conventional solutions to meet local area needs that otherwise would require new transmission or conventional generation infrastructure.

²http://www.caiso.com/Documents/Paper-Non-ConventionalAlternatives-2013-2014TransmissionPlanningProcess.pdf

³ To be precise, "preferred resources" as defined in CPUC proceedings applies more specifically to demand response and energy efficiency, with renewable generation and combined heat and power being next in the loading order. The term is used more generally here consistent with the more general use of the resources sought ahead of conventional generation.

As procurement activities evolve and provide better information on the detailed characteristics of available products, we anticipate further refinement and improvement upon study methods.

TRANSMISSION ELEMENTS SUPPORTING RENEWABLE ENERGY GOALS

As in the 2013-2014 planning cycle, the ISO's analysis of the needs of the transmission system to support the state's 33% renewables portfolio strategy was based on the three renewable generation scenarios for meeting the 33 percent RPS goal in 2020 developed by the CPUC. The reduced number of scenarios from earlier transmission planning cycles and less variability between several of the scenarios are indicative of less variability than in the past, as utilities move to complete their contracting for renewable resources to meet the 2020 goals, and there is more certainty about which areas resources will locate in.

The ISO assessment in this planning cycle did not identify any new transmission projects to support achievement of California's 33 percent RPS goal given the transmission projects already approved or progressing through the CPUC approval process.

However, the 2013-2014 planning analysis indicated that the deliverability of future renewable generation from the Imperial Valley area had been significantly reduced primarily due to changes in flow patterns resulting from the retirement of SONGS. Despite the impacts being heavily offset by other reinforcements proposed in that transmission plan, only 1000 MW of the 1715 MW of Imperial zone renewable generation portfolio amounts can be made deliverable. The change also impacted the ability to support deliverability of import capability from the Imperial Irrigation District. Given this significant change in circumstance, the ISO conducted further study in the 2014-2015 transmission planning cycle to develop the most effective solution to this issue.

In this planning cycle, the ISO has identified operational solutions that, coupled with previously approved transmission reinforcements, restore the deliverability of future renewable generation from the Imperial Valley area to the levels that were forecast before the early retirement of SONGS. These new measures, in combination with previously approved transmission projects, result in a forecast of over 1700 MW of incremental capacity for new renewables above existing generation. As approximately 1200 MW of new renewable generation is already moving forward in the Imperial area – whether connecting to the IID or ISO system - there remains a forecast of between 500 and 750 MW being available above renewables projects already moving forward, depending on the precise location within the Imperial area.

Further, the ISO also analyzed as a sensitivity study the transmission requirements necessary to deliver up to 2500 MW incremental renewable generation, above existing levels, from the Imperial Valley area and identified further transmission alternatives for consideration should renewable development call for further reinforcement.

Table 2 provides a summary of the various transmission elements of the 2014-2015 transmission plan for supporting California's RPS in addition to providing other reliability benefits. These elements are composed of the following categories:

- major transmission projects that have been previously approved by the ISO and are fully permitted by the CPUC for construction – all but one of which (Tehachapi) are completed;
- additional transmission projects that the ISO interconnection studies have shown are needed for access to new renewable resources but are still progressing through the approval process; and
- major transmission projects that have been previously approved by the ISO but are not yet permitted.

Table 2: Elements of 2014-2015 ISO Transmission Plan Supporting Renewable Energy
Goals

Transmission Facility	Online		
Transmission Facilities Approved, Permitted and Under Construction			
Sunrise Powerlink (completed)	2012		
Tehachapi Transmission Project	2016		
Colorado River - Valley 500 kV line (completed)	2013		
Eldorado – Ivanpah 230 kV line (completed)	2013		
Carrizo Midway Reconductoring (completed)	2013		
Additional Network Transmission Identified as Needed in ISO Interconnection Agreements but not Permitted			
Borden Gregg Reconductoring	2019		
South of Contra Costa Reconductoring	2016		
West of Devers Reconductoring	2019		
Coolwater - Lugo 230 kV line	2018		
Policy-Driven Transmission Elements Approved but not Permitted			
Mirage-Devers 230 kV reconductoring (Path 42)	2015		

Imperial Valley Area Collector Station	2015		
Sycamore – Penasquitos 230kV Line	2017		
Eldorado-Mohave and Eldorado-Moenkopi 500 kV Line Swap	2016		
Lugo – Eldorado series cap and terminal equipment upgrade	2016		
Warnerville-Bellota 230 kV line reconductoring	2017		
Wilson-Le Grand 115 kV line reconductoring	2020		
Suncrest 300 Mvar SVC	2017		
Lugo-Mohave series capacitors	2017		
Additional Policy-Driven Transmission Elements Recommend for Approval			
None identified in 2014-2015 Transmission Plan			

ECONOMICALLY-DRIVEN TRANSMISSION PROJECTS

The objective of the ISO's economic studies is to identify transmission congestion and analyze if the congestion can be cost effectively mitigated by network upgrades. Generally speaking, transmission congestion increases consumer costs because it prevents lower priced electricity from serving load. Resolving congestion bottlenecks is cost effective when projected ratepayer savings are greater than the cost of the project. In such cases, the transmission upgrade can be justified as an economic project.

Through its own analysis and the input of stakeholders, the ISO identified the five highest priority studies in the 2014-2015 planning cycle. The analyses compared the cost of the mitigation plans to the expected reduction in production costs, congestion costs, transmission losses, capacity or other electric supply costs resulting from improved access to cost-efficient resources.

Based on the economic analysis, the ISO is recommending proceeding with one of these projects; the Lodi-Eight Mile 230 kV project. The project consists of reconductoring the existing 230 kV circuit to a higher ampacity, to alleviate thermal limits. The estimated cost of this economic-driven project is \$7 million. The economic benefits from improved economic dispatch of generation is estimated to provide consumer benefits of 3 to 4 million per year, resulting in an overall benefit to cost ratio of over 4 to 1.

As well, the ISO has reviewed a request window submission from Blythe Energy Inc. for consideration of a proposed Buck-Colorado River-Julian Hinds (B-CRSS-JH) loop-in transmission line project. This consists of looping in the existing Buck-Julian Hinds 230 kV generator tie to the existing Colorado River substation. The ISO is continuing to

review the economic benefits claimed in the submission, and assess the reliability impacts of the proposed reconfiguration. Management would prefer to retain the option of bringing a recommendation to the Board once this further study is complete rather than delaying resolution to the 2015-2016 planning cycle, if the proposal is found to be needed.

COMPETITIVE SOLICITATION FOR NEW TRANSMISSION ELEMENTS

The ISO's transmission planning process includes a competitive solicitation process for reliability-driven, policy-driven and economically-driven transmission facilities over 200 kV. Upgrades to or additions on an existing participating transmission owner facility and the construction or ownership of facilities within an existing participating transmission owner's substation are excluded from competition.

None of the transmission projects in this transmission plan include facilities eligible for competitive solicitation.

STAKEHOLDER FEEDBACK

Stakeholders have provided feedback on the draft ISO 2014-2015 transmission plan that was released on February 3, 2015 and presented at a stakeholder meeting on February 12, 2015. The more significant stakeholder concerns, and our response to those concerns, are summarized below.

• *Mixed support for individual projects* – Stakeholder support for a number of projects evaluated in the plan as potential solutions was mixed, ranging from strong support to concern with certain projects proceeding.

<u>ISO response</u>: The ISO has reviewed all of the comments carefully, and has concluded that the recommendations made in the transmission plan are appropriate.

• San Francisco Peninsula reinforcement – Comments ranged from support for the project, to requests for further detail. Several stakeholders requested more information to be made public, especially regarding third party action concerns. Also, because capital maintenance by transmission owners may also incidentally increase transmission capacity, there were requests for stronger ISO participation in the capital maintenance program in the area. Further, one party asked for a delay of 3 or 4 months for further consideration.

<u>**ISO response:**</u> The ISO has reviewed the material provided to date, including the foundational study prepared in the 2013-2014 planning cycle. Much of this information is accessible only through the ISO market participant portal – a secure website – due to the sensitive nature of the information. We have

responded to stakeholder comments, and consider the material available sufficient and appropriate for the particular issues. Further, the ISO's analysis in this cycle was conducted on a comprehensive basis through the ISO's stakeholder participation framework over the last several planning cycles. Therefore the ISO does not see value in adding a further delay.

• North East Kern 70 to 115 kV voltage conversion – Comments range from support to requesting lower cost alternatives and a reduced project scope.

ISO response: The ISO has reviewed these comments, and provided additional information and clarification in the revised draft transmission plan as well as in the responses to stakeholder comments posted as part of the stakeholder process. We have concluded that the recommendations made in the transmission plan are appropriate.

• The Buck-Colorado River-Julian Hinds (B-CRSS-JH) loop-in transmission line project (not recommended for approval at this time) – The ISO has received extensive input from the proponent supporting approval of the project in the transmission plan for perceived reliability, policy and economic benefits, as well as several letters to Management supportive of the project.

ISO response: As noted above, the ISO is continuing its review of the benefits identified in the stakeholder material submitted to the ISO, and is reviewing the potential reliability implications of the project. While the proponent identified potential reliability benefits to the project addressing certain concerns on the grid, other unintended consequences have been identified that also require consideration. Management intends to bring any recommendation stemming from this review to a subsequent Board meeting if the project is ultimately found to be needed.

 Participation in upsizing WAPA's proposed 230 kV San Luis transmission project to 500 kV (not recommended for approval) – Stakeholder comments have ranged from strong support to concerns with ISO participation in the project, which would entail the ISO funding three quarters of the cost of the 500 kV alternative and receiving capacity rights to approximately 1200 MW – three quarters of the capacity of the proposed 500 kV alternative. Proponents have indicated that WAPA will proceed with the 230 kV alternative to meet service requests from the Bureau of Reclamation, and that the right of way should be put to better uses for the higher capacity transmission line.

ISO response: The ISO's focus has been on the need for the increased capacity that would be added to the ISO system, and the incremental impact to customers in the ISO footprint. In reviewing the merits of the proposal

through the need analysis conducted in the ISO's planning process, the ISO has not identified reliability, policy or economic needs for the capacity in the planning horizon.

• **Proposals for other forms of mitigation**, such as the retrofitting of existing generation to be capable of switching between generator mode and synchronous condenser mode (as a transmission asset).

ISO response: The ISO has reviewed all of the comments carefully, especially in areas where there were suggestions that we were inconsistent in our considerations and application of the various planning criteria. We have concluded that the recommendations made in the transmission plan are appropriate. The particular proposals to retrofit existing generation to be able to alternate between operating as synchronous condensers and as generators do not qualify as transmission assets, and further were not found to be needed for reliability purposes, as the reliability benefits of the existing generation are greater when operated as generators. The potential economic benefits of the dual capabilities are market driven, and should be explored through procurement processes.

 Study of LA Basin and San Diego area needs and Imperial area needs – Stakeholders expressed a wide range of views regarding various alternatives being considered, as well as different views on the need for more immediate action. In particular, one stakeholder submitted extensive comments on the attributes of the Lake Elsinore Advanced Pumped Storage project, and was particularly critical of the ISO's planning process and treatment of this project in that regard.

ISO response: The ISO has been seeking a balanced, reasoned approach, recognizing the uncertainties that need to be addressed, the need to address reasonable lead times for reinforcements, and the need to progress on all fronts – preferred and conventional resources and system reinforcement. As no residual need was identified in this planning cycle, no additional approvals or resource authorizations are being sought. The future needs in both cases will continue to be reviewed in future planning cycles. Regarding the LEAPS project, the ISO has reviewed the comments in detail and confirmed that its handling of the LEAPS project has been consistent with its planning process and tariff requirements.

 Analysis of preferred resources – As in last year's planning cycle, a number of stakeholders have commented favorably on the steps the ISO has taken to develop more information that can assist in the identification and procurement of preferred resources that meet local needs, rather than exclusively system needs. Others have called for more analysis and more specific results, and in particular, questioned why the analysis of preferred resources was more indepth in some areas than others.

ISO response: We are pleased with the encouragement received from stakeholders, and do intend to further the analysis of potential preferred resource mixes in future planning cycles. We expect this work to continue to be improved upon as more is learned about preferred resource capabilities through procurement activities. However, specific local circumstances and the reliability issues being addressed are critical in considering the applicability of preferred resources in addressing transmission-related issues.

CONCLUSION

The 2014-2015 ISO transmission plan provides a comprehensive evaluation of the ISO transmission grid to identify upgrades needed to adequately meet California's policy goals, address grid reliability requirements and bring economic benefits to consumers. This year's plan identified 8 transmission projects, estimated to cost a total of approximately \$359 million, as needed to maintain the reliability of the ISO transmission system, meet the state's renewable energy mandate, and deliver material economic benefits.

The transmission plan also identified one subject which requires further study and which may result in Management seeking additional Board approvals of certain amendments to the 2014-2015 transmission plan at a future meeting:

Based on the findings that the transmission solutions listed above are the most costeffective, feasible solutions for meeting the identified transmission needs in the ISO system, Management recommends that the Board approve the attached ISO 2014-2015 transmission plan.